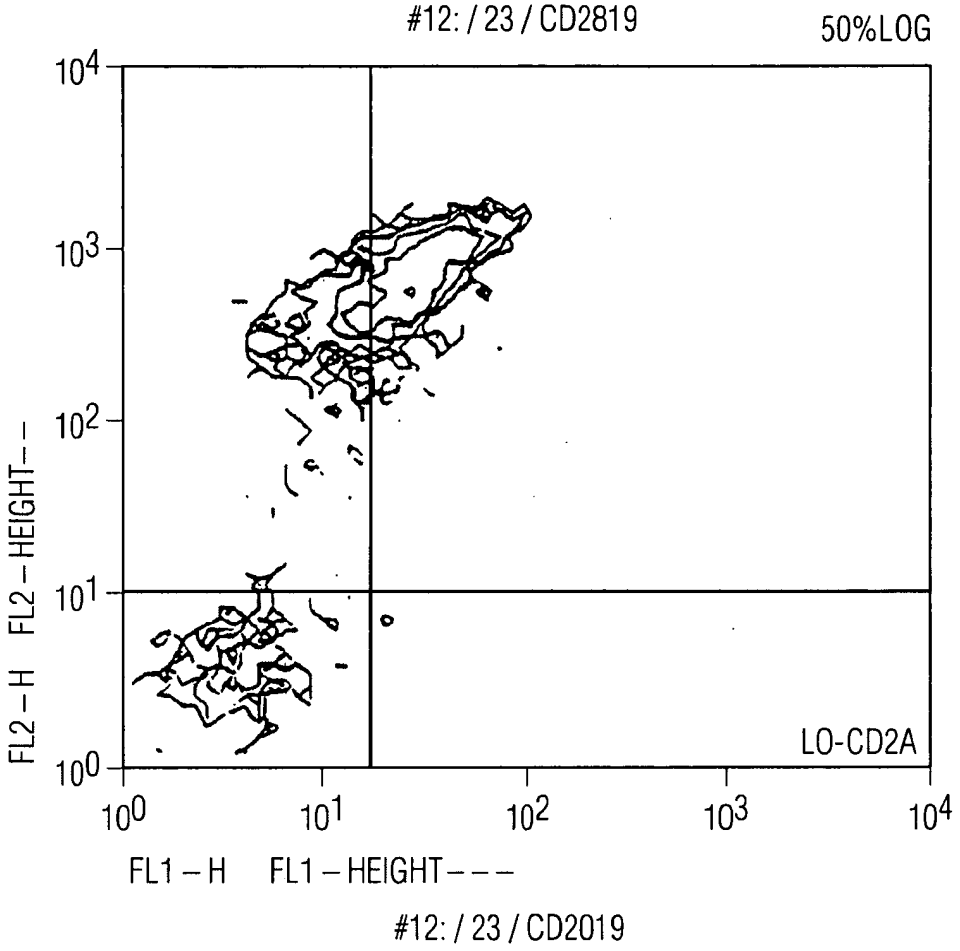


– – – QUAD STATS – – –
FILE: #12: / 23 / CD2019 SAMPLE: 059
DATE: 9 / 24 / 92 GATE G1 – R1
PARAMETER: FL1 –H (LOG) FL2 –H (LOG) QUAD
LOCATION: 17.15.9

TOTAL= QUAD	5000 EVENTS	GATED = % GATED	L290 %TOTAL	X MEAN	Y MEAN
IUL	299	23.18	3.98	11.41	284.69
2UR	851	65.97	17.02	32.70	630.65
3LL	135	10.47	2.70	4.08	3.31
4LR	5	0.39	0.10	25.11	6.54

FIG. 1

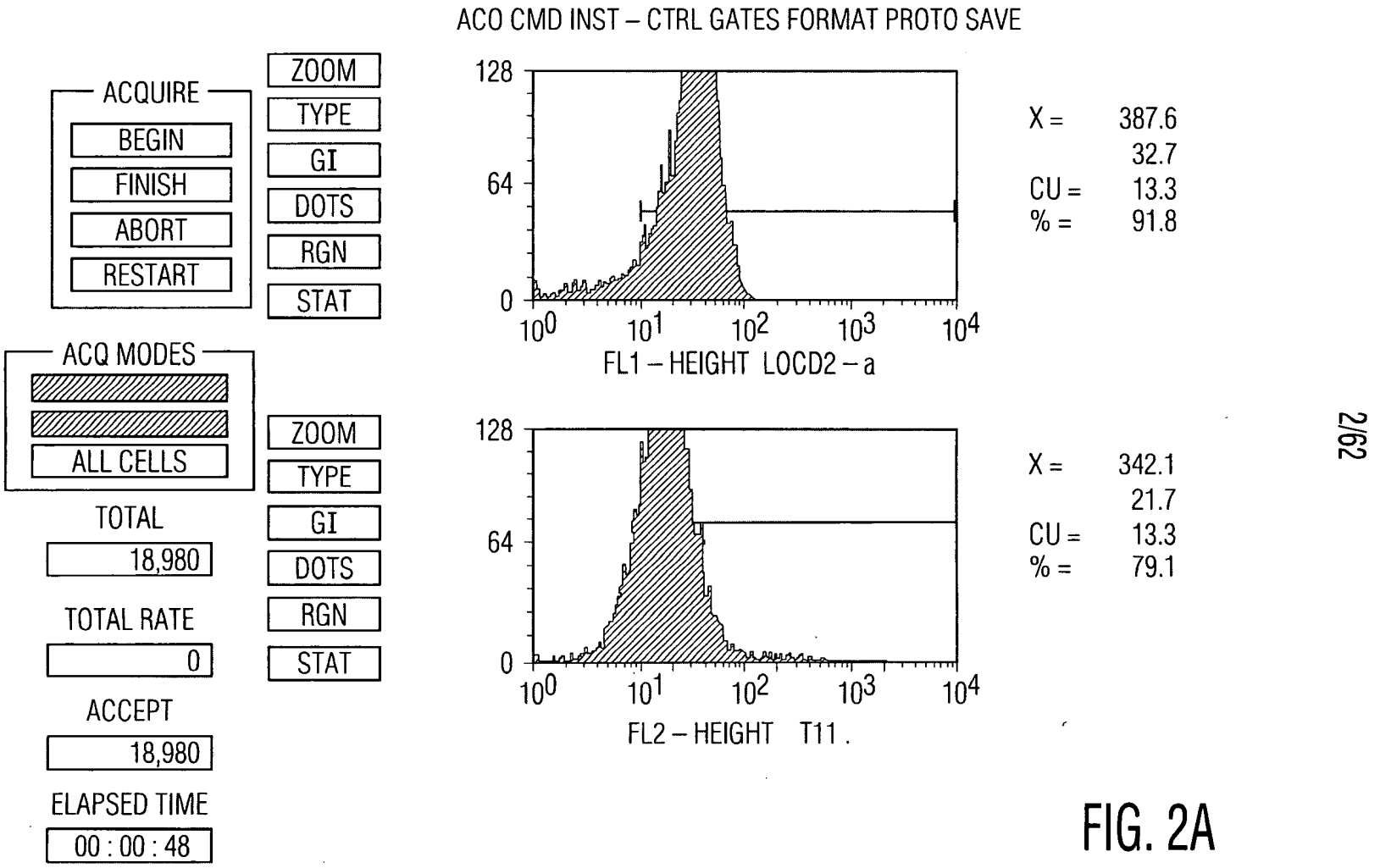

ACO CMD INST – CTRL GATES FORMAT PROTO SAVE
ACQUIRE
BEGIN
FINISH
ABORT
RESTART
ZOOM
TYPE
GI
DOTS
RGN
STAT
ACQ MODES
ALL CELLS
TOTAL
18,980
TOTAL RATE
0
ACCEPT
18,980
ELAPSED TIME
00 : 00 : 48
128
64
0
10^0 10^1 10^2 10^3 10^4
FL1 – HEIGHT LOCD2 – a
X = 387.6
32.7
CU = 13.3
% = 91.8
128
64
0
10^0 10^1 10^2 10^3 10^4
FL2 – HEIGHT T11 .
X = 342.1
21.7
CU = 13.3
% = 79.1

FIG. 2A

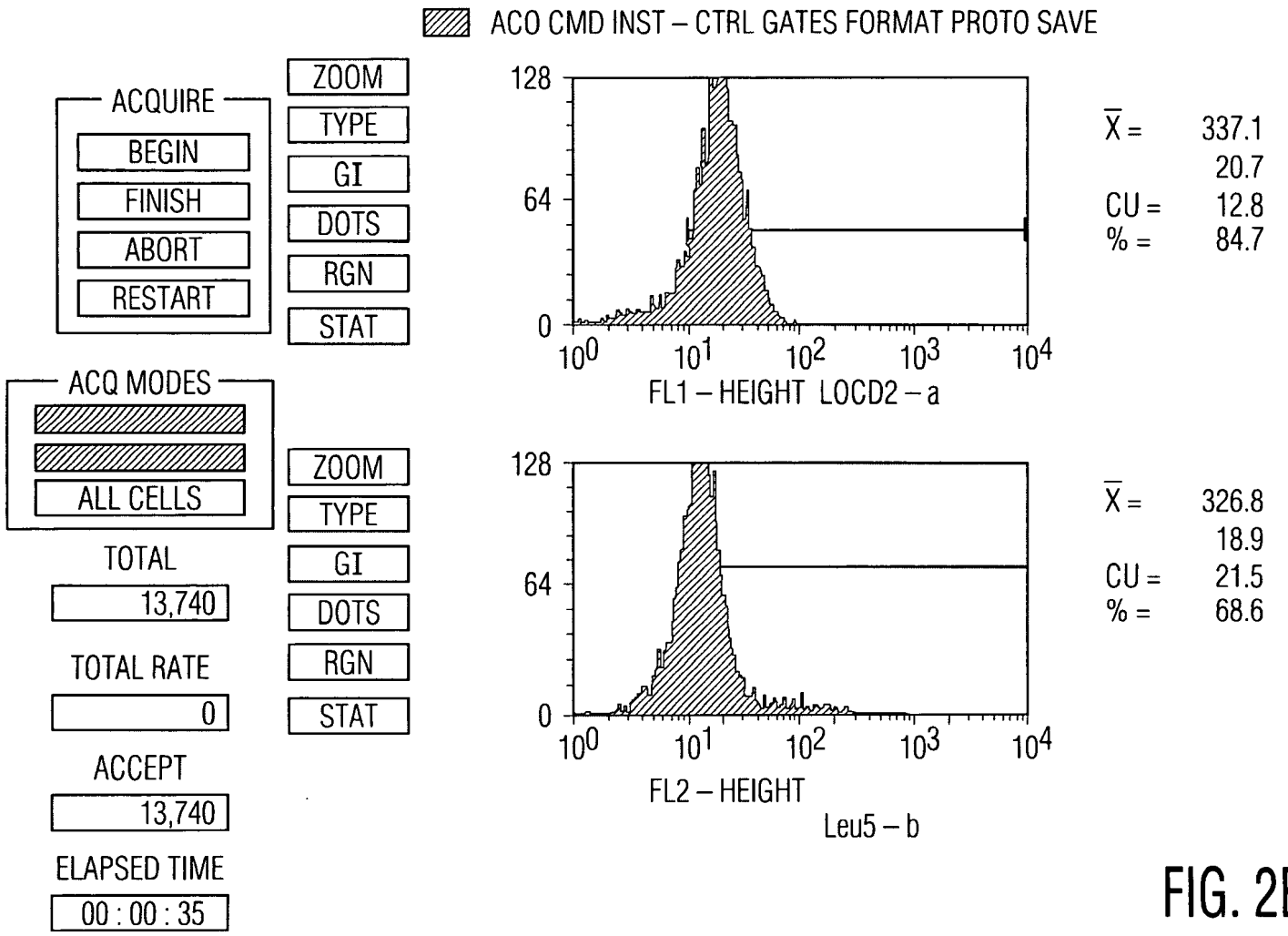

ACO CMD INST – CTRL GATES FORMAT PROTO SAVE
ACQUIRE
BEGIN
FINISH
ABORT
RESTART
ZOOM
TYPE
GI
DOTS
RGN
STAT
ACQ MODES
ALL CELLS
TOTAL
13,740
TOTAL RATE
0
ACCEPT
13,740
ELAPSED TIME
00 : 00 : 35
128
64
0
10^0 10^1 10^2 10^3 10^4
FL1 – HEIGHT LOCD2 – a
$\bar{X}$ = 337.1
20.7
CU = 12.8
% = 84.7
128
64
0
10^0 10^1 10^2 10^3 10^4
FL2 – HEIGHT
Leu5 – b
$\bar{X}$ = 326.8
18.9
CU = 21.5
% = 68.6

FIG. 2B

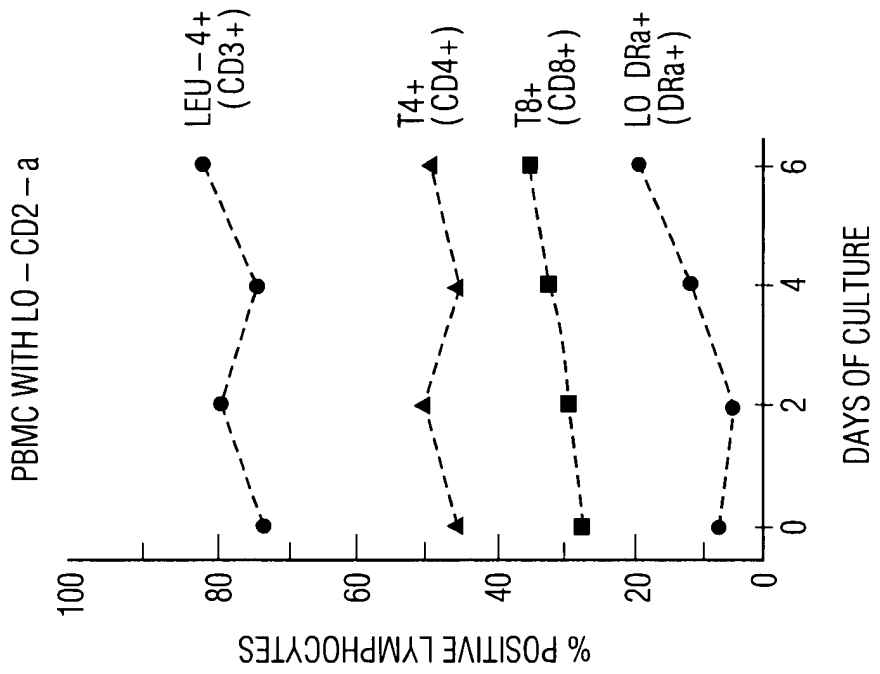

PBMC WITH LO – CD2 – a
% POSITIVE LYMPHOCYTES
DAYS OF CULTURE
LEU – 4+ (CD3+)
T4+ (CD4+)
T8+ (CD8+)
LO DRa+ (DRa+)
100
80
60
40
20
0
0
2
4
6

FIG. 3B

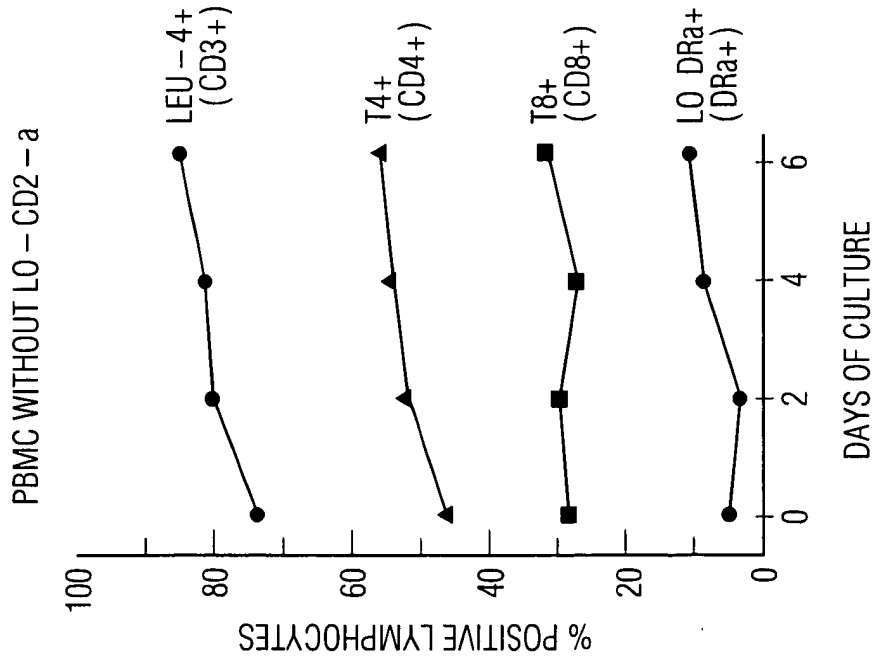

PBMC WITHOUT LO – CD2 – a
% POSITIVE LYMPHOCYTES
DAYS OF CULTURE
LEU – 4+ (CD3+)
T4+ (CD4+)
T8+ (CD8+)
LO DRa+ (DRa+)
100
80
60
40
20
0
0
2
4
6

FIG. 3A

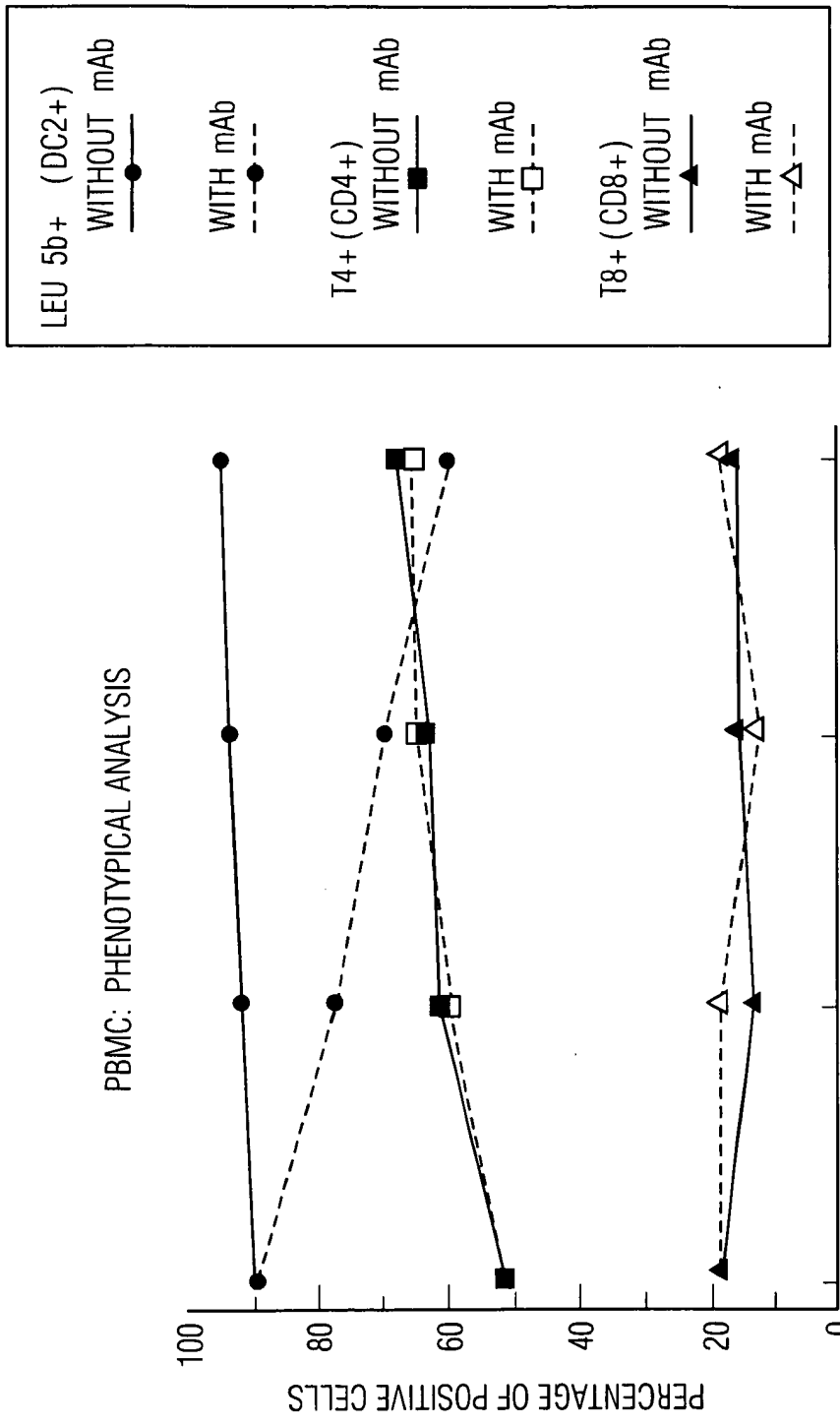

LEU 5b+ (DC2+)
WITHOUT mAb
WITH mAb
T4+ (CD4+)
WITHOUT mAb
WITH mAb
T8+ (CD8+)
WITHOUT mAb
WITH mAb
PBMC: PHENOTYPICAL ANALYSIS
PERCENTAGE OF POSITIVE CELLS
100
80
60
40
20
0
0
2
4
6
DAYS OF CULTURE

FIG. 4

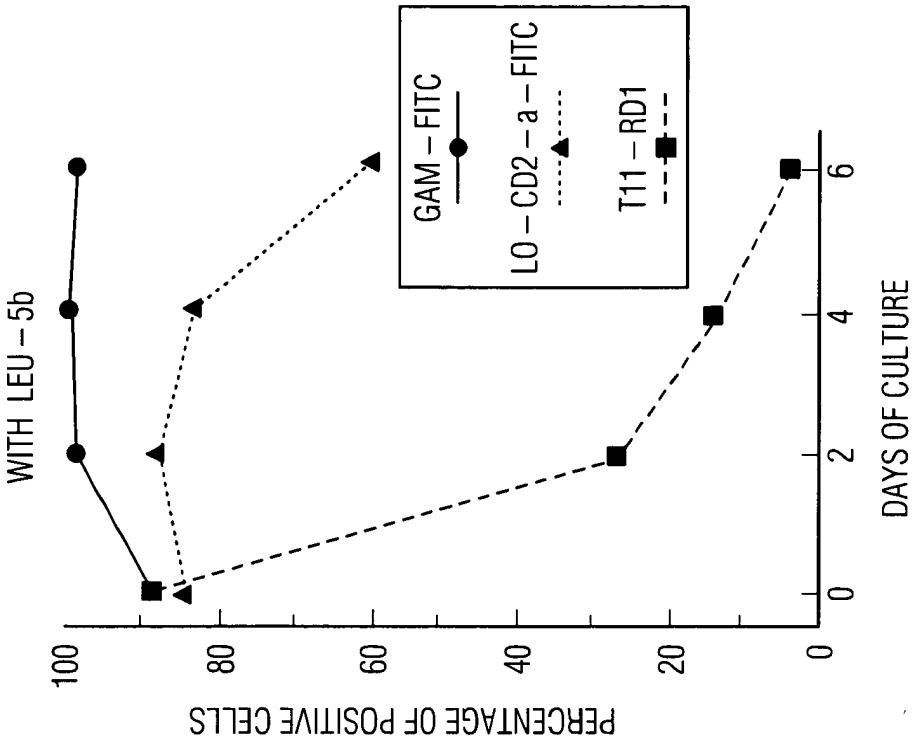

WITH LEU – 5b
PERCENTAGE OF POSITIVE CELLS
DAYS OF CULTURE
GAM – FITC
LO – CD2 – a – FITC
T11 – RD1
0
20
40
60
80
100
0
2
4
6

FIG. 5B

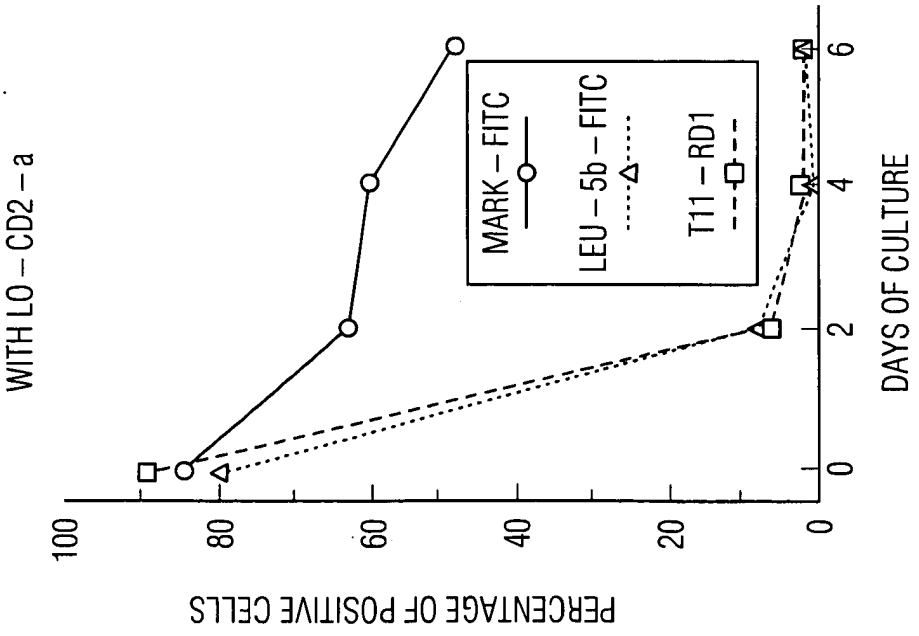

WITH LO – CD2 – a
PERCENTAGE OF POSITIVE CELLS
DAYS OF CULTURE
MARK – FITC
LEU – 5b – FITC
T11 – RD1
0
20
40
60
80
100
0
2
4
6

FIG. 5A

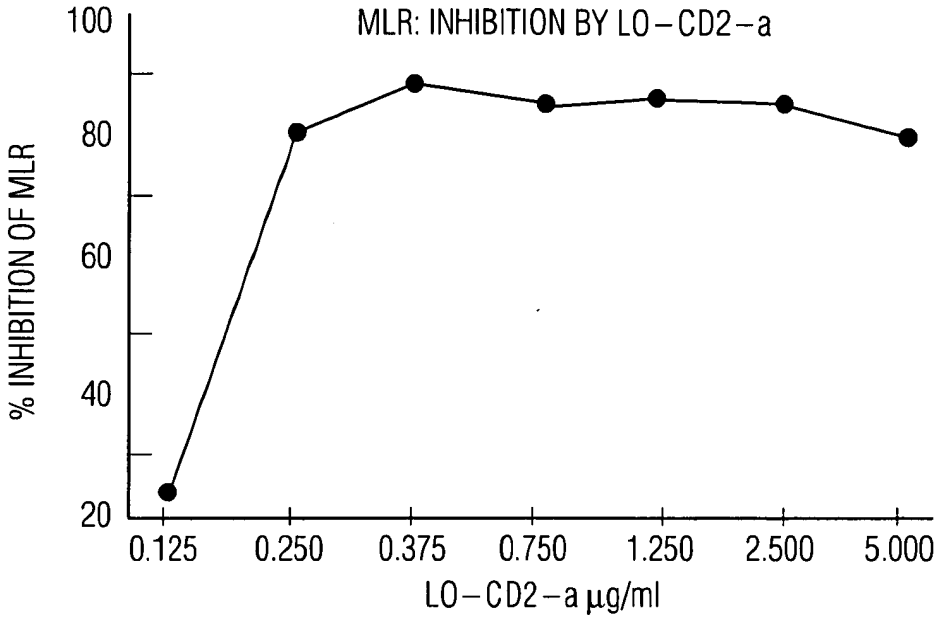

MLR: INHIBITION BY LO-CD2-a
% INHIBITION OF MLR
100
80
60
40
20
0.125
0.250
0.375
0.750
1.250
2.500
5.000
LO-CD2-a µg/ml

FIG. 6A

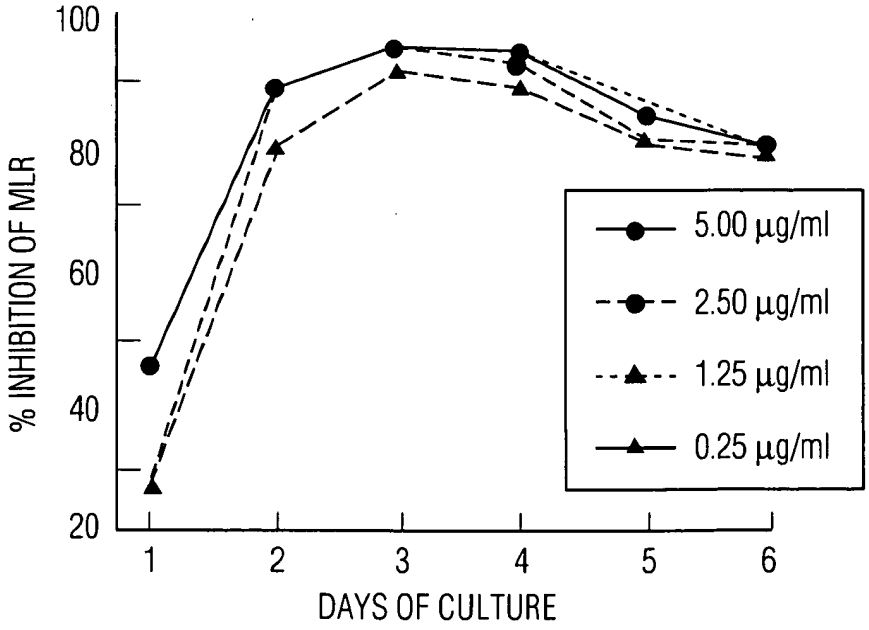

% INHIBITION OF MLR
100
80
60
40
20
1
2
3
4
5
6
DAYS OF CULTURE
5.00 µg/ml
2.50 µg/ml
1.25 µg/ml
0.25 µg/ml

FIG. 6B

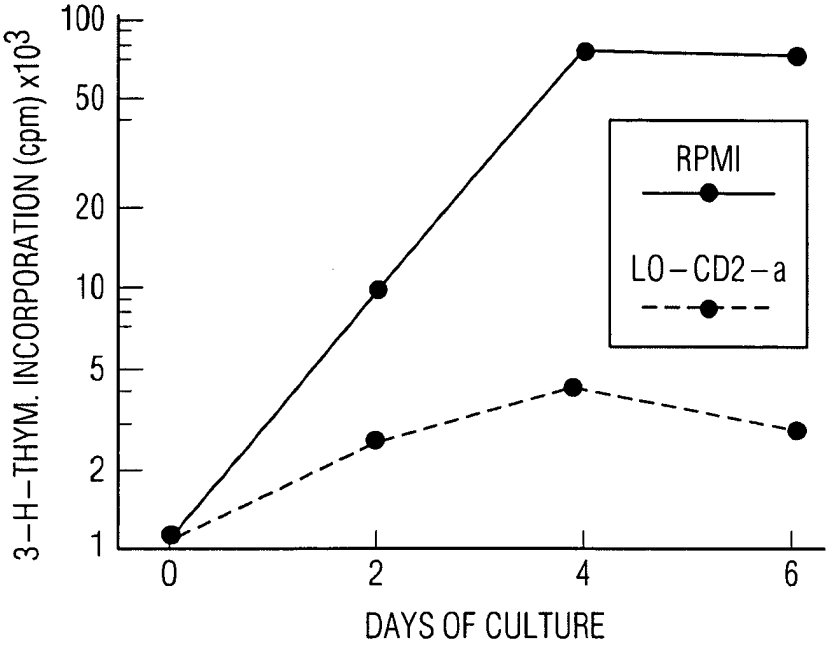

3-H-THYM. INCORPORATION (cpm) x10³
100
50
20
10
5
2
1
0
2
4
6
DAYS OF CULTURE
RPMI
LO-CD2-a

FIG. 6C

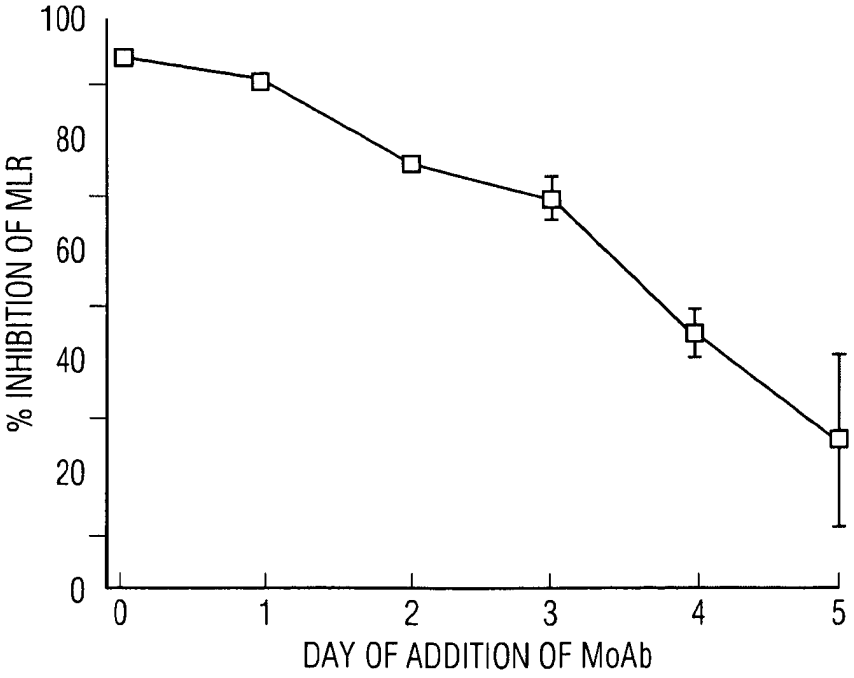

% INHIBITION OF MLR
100
80
60
40
20
0
0
1
2
3
4
5
DAY OF ADDITION OF MoAb

FIG. 6D

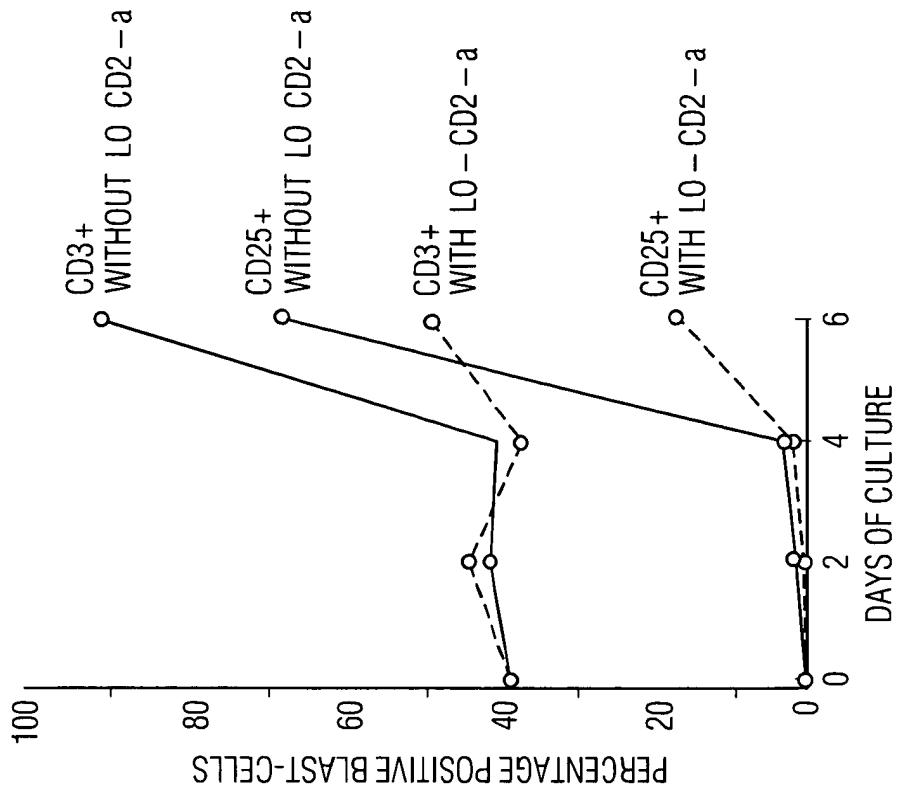

CD3+
WITHOUT LO CD2 – a
CD25+
WITHOUT LO CD2 – a
CD3+
WITH LO – CD2 – a
CD25+
WITH LO – CD2 – a
PERCENTAGE POSITIVE BLAST-CELLS
100
80
60
40
20
0
0
2
4
6
DAYS OF CULTURE

FIG. 7B

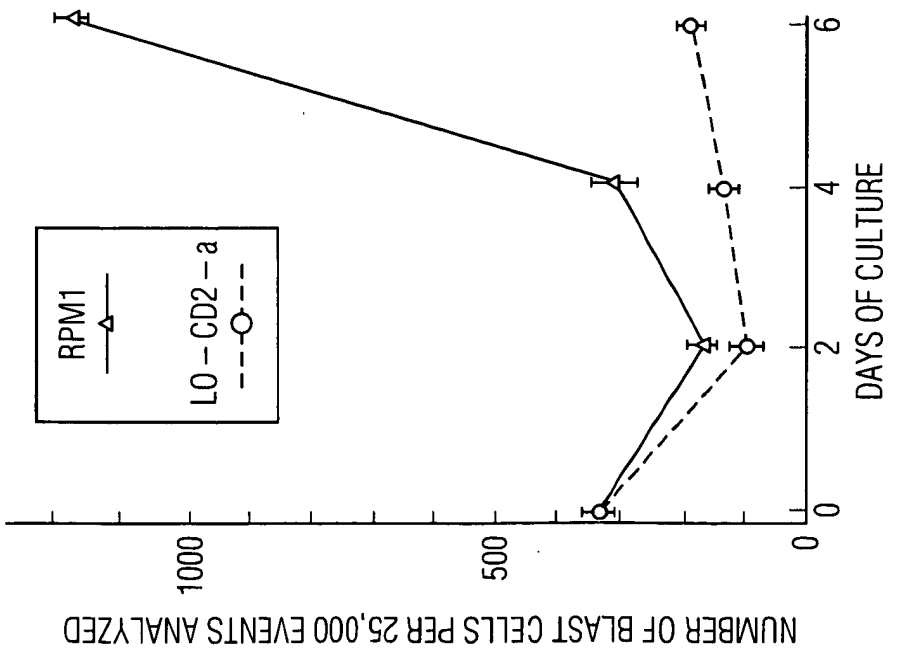

RPM1
LO – CD2 – a
NUMBER OF BLAST CELLS PER 25,000 EVENTS ANALYZED
1000
500
0
0
2
4
6
DAYS OF CULTURE

FIG. 7A

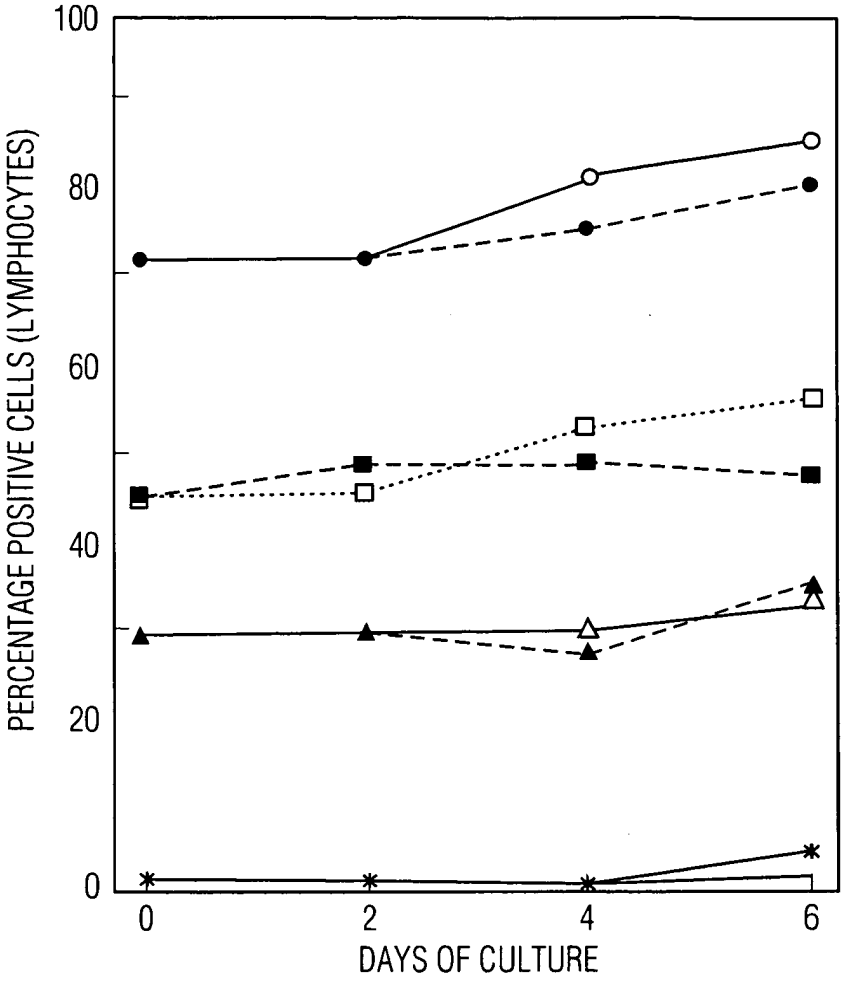

100
80
60
40
20
0
PERCENTAGE POSITIVE CELLS (LYMPHOCYTES)
0
2
4
6
DAYS OF CULTURE
CD3+ (–MoAb)
CD3+ (–MoAb)
CD8+ (–MoAb)
CD8+ (+MoAb)
CO4+ (–MoAb)
CD4+ (–MoAb)
CD25+ (–MoAb)
CD25+ (+MoAb)

FIG. 8A

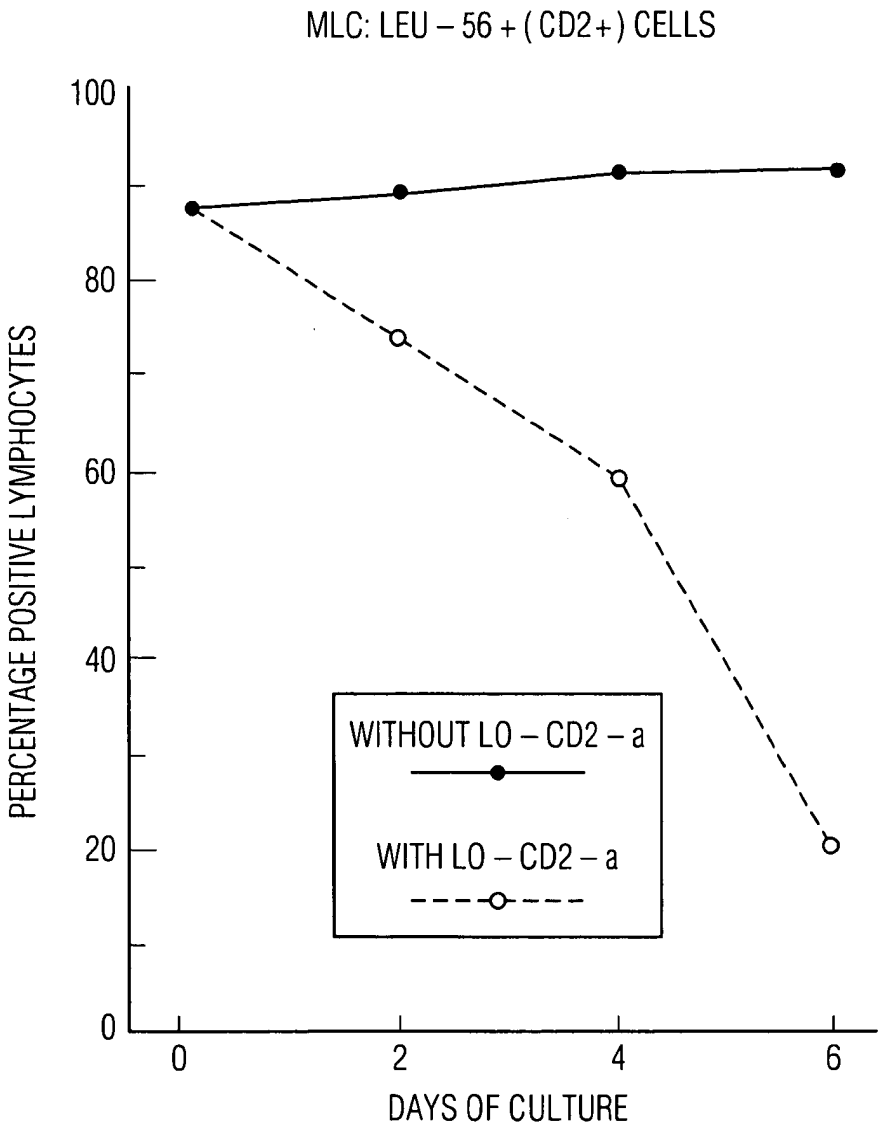

MLC: LEU – 56 + (CD2+) CELLS
PERCENTAGE POSITIVE LYMPHOCYTES
100
80
60
40
20
0
0
2
4
6
DAYS OF CULTURE
WITHOUT LO – CD2 – a
WITH LO – CD2 – a

FIG. 8B

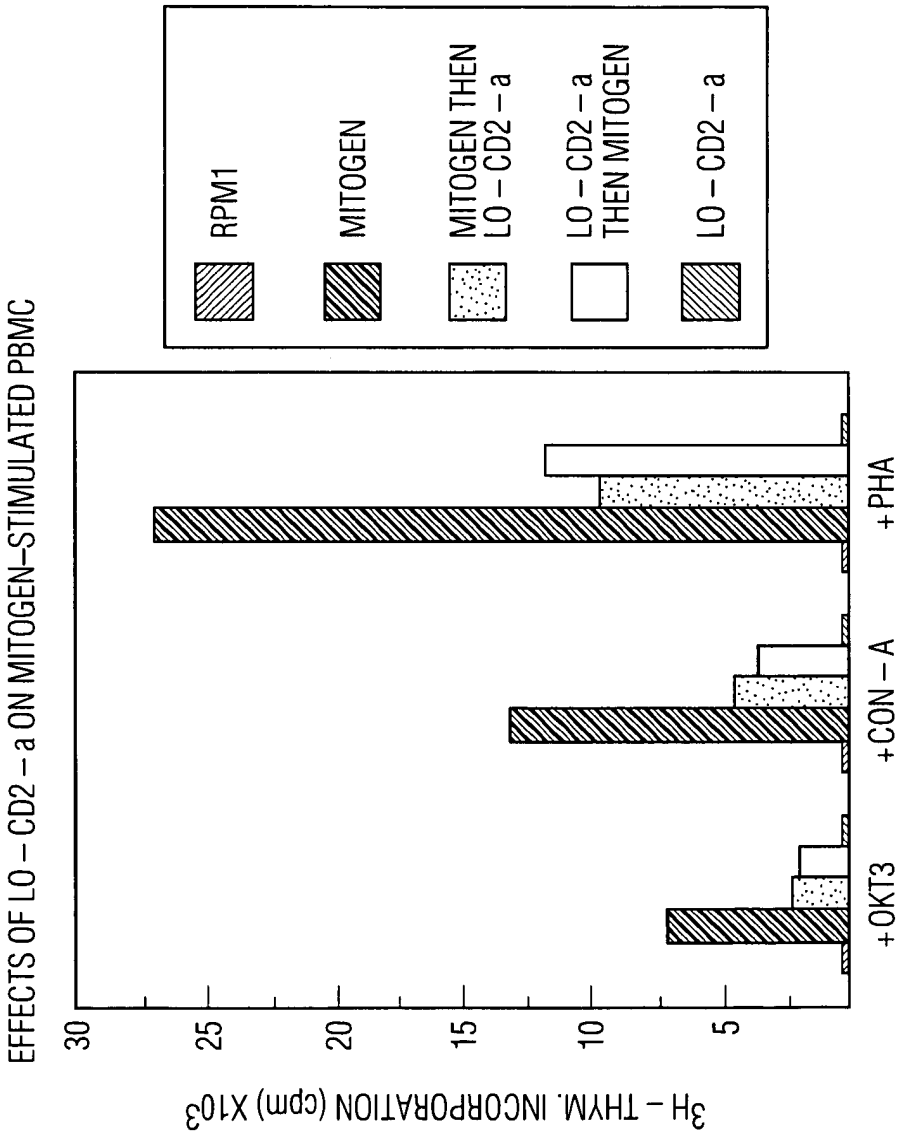

EFFECTS OF LO – CD2 – a ON MITOGEN–STIMULATED PBMC
RPM1
MITOGEN
MITOGEN THEN LO – CD2 – a
LO – CD2 – a THEN MITOGEN
LO – CD2 – a
3H – THYM. INCORPORATION (cpm) X10³
30
25
20
15
10
5
+OKT3
+CON – A
+PHA

FIG. 9

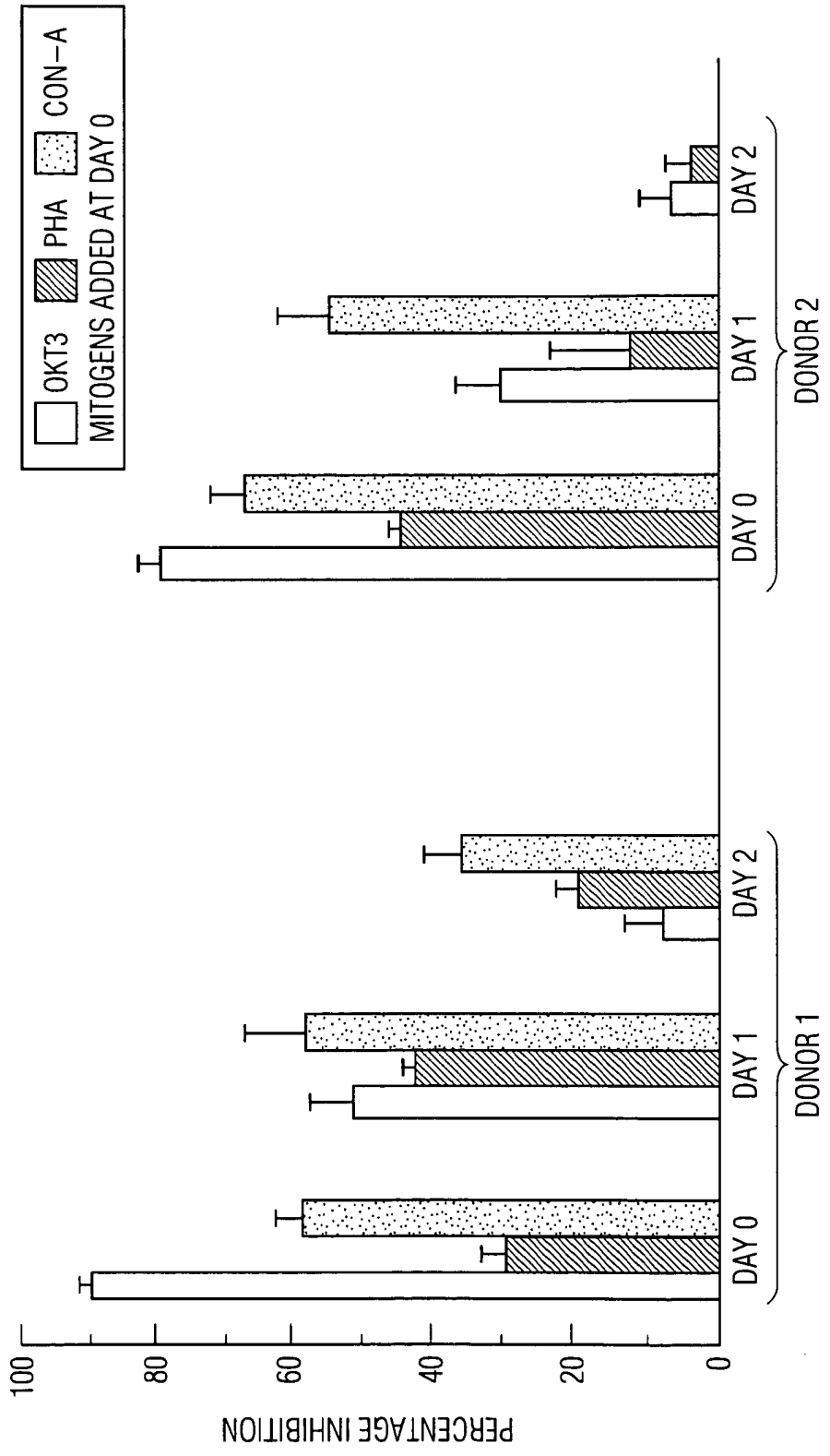

MITOGENS ADDED AT DAY 0
OKT3
PHA
CON-A
PERCENTAGE INHIBITION
100
80
60
40
20
0
DAY 0
DAY 1
DAY 2
DONOR 1
DONOR 2

FIG. 10

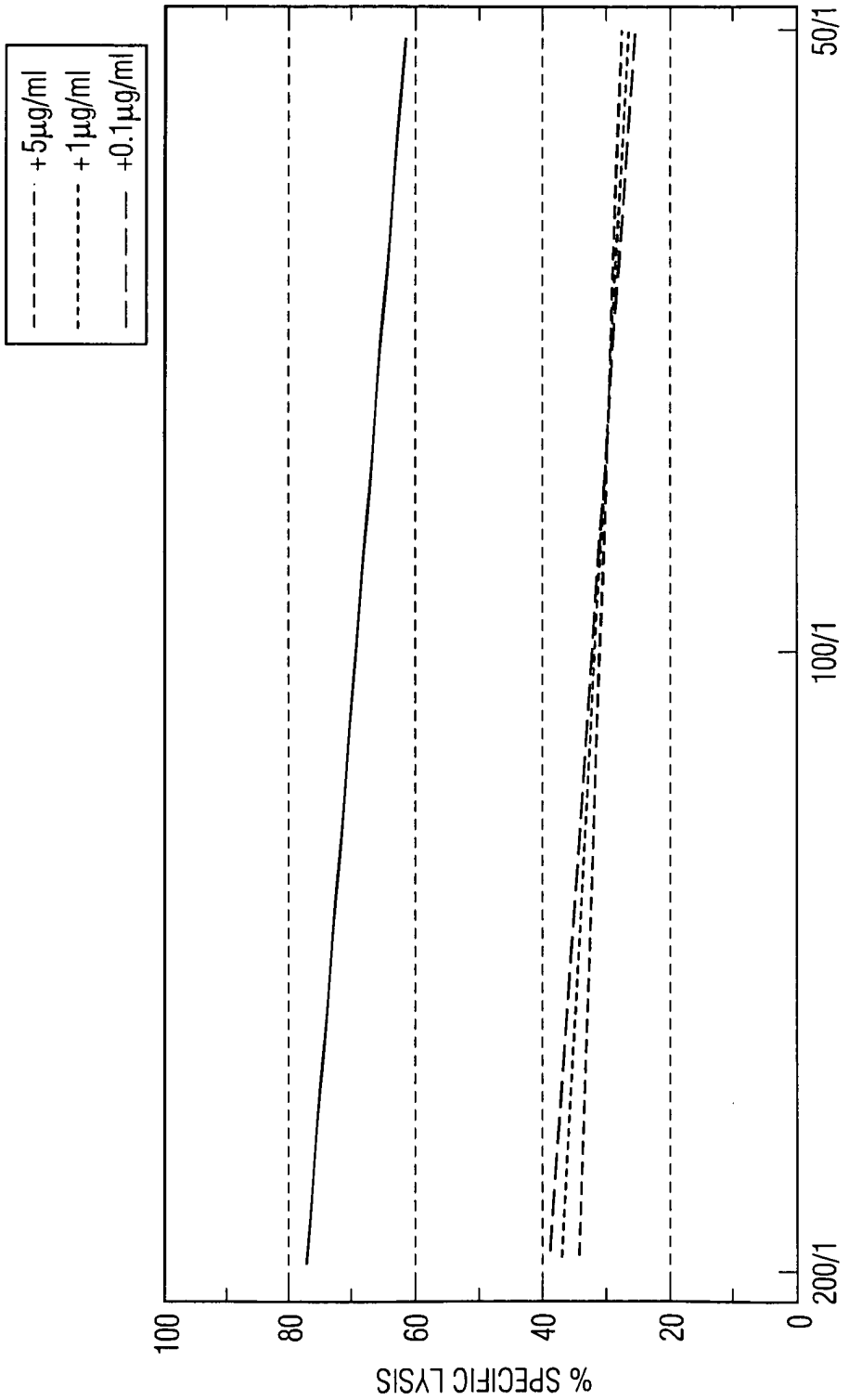

+5µg/ml
+1µg/ml
+0.1µg/ml
% SPECIFIC LYSIS
100
80
60
40
20
0
200/1
100/1
50/1
E/T RATIO

FIG. 11A

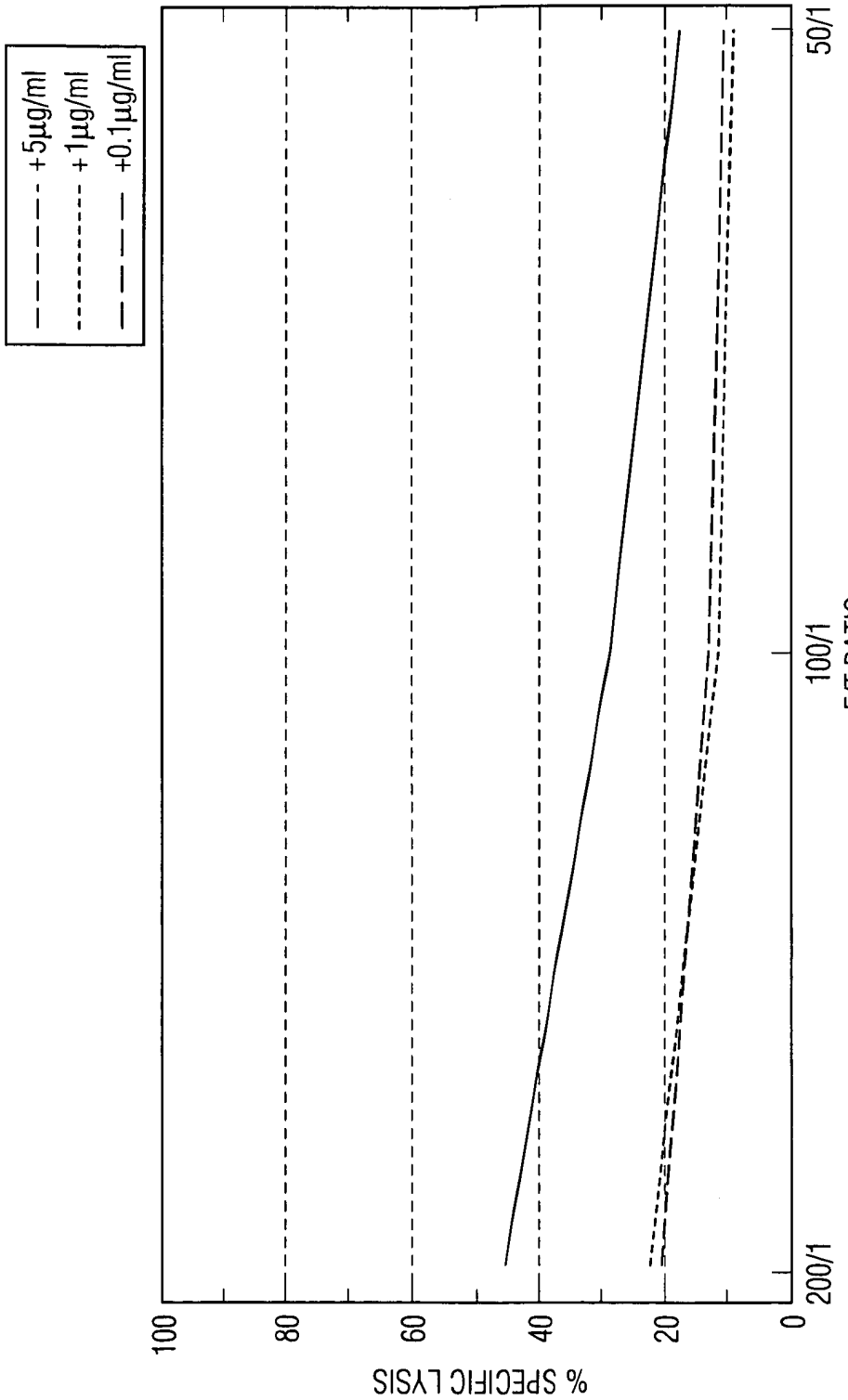

+5µg/ml
+1µg/ml
+0.1µg/ml
% SPECIFIC LYSIS
100
80
60
40
20
0
200/1
100/1
50/1
E/T RATIO

FIG. 11B

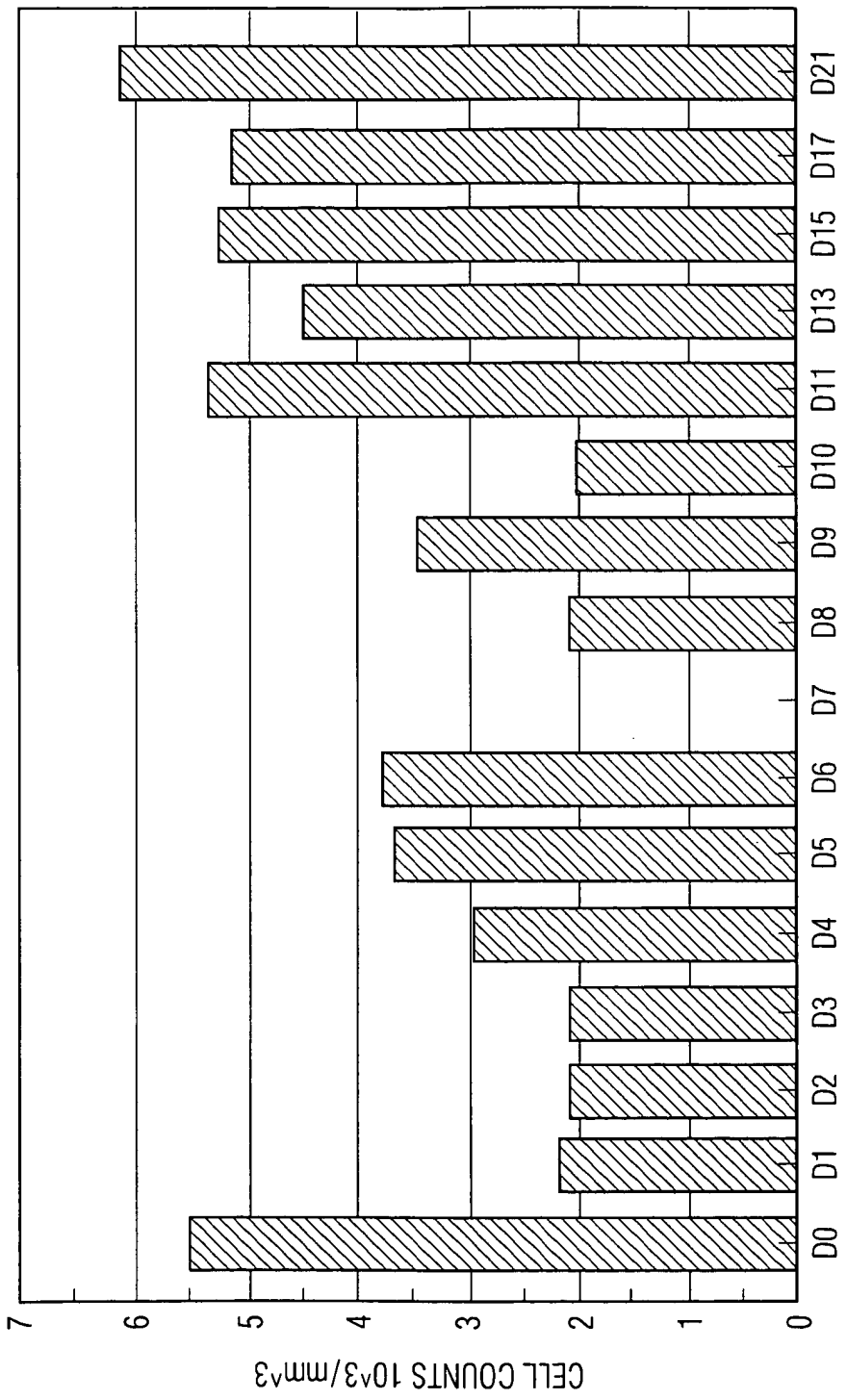

CELL COUNTS 10^3/mm^3
0
1
2
3
4
5
6
7
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D13
D15
D17
D21
TIME (DAYS)
LOCD2 20mg/DAY
D0 – D9

FIG. 12

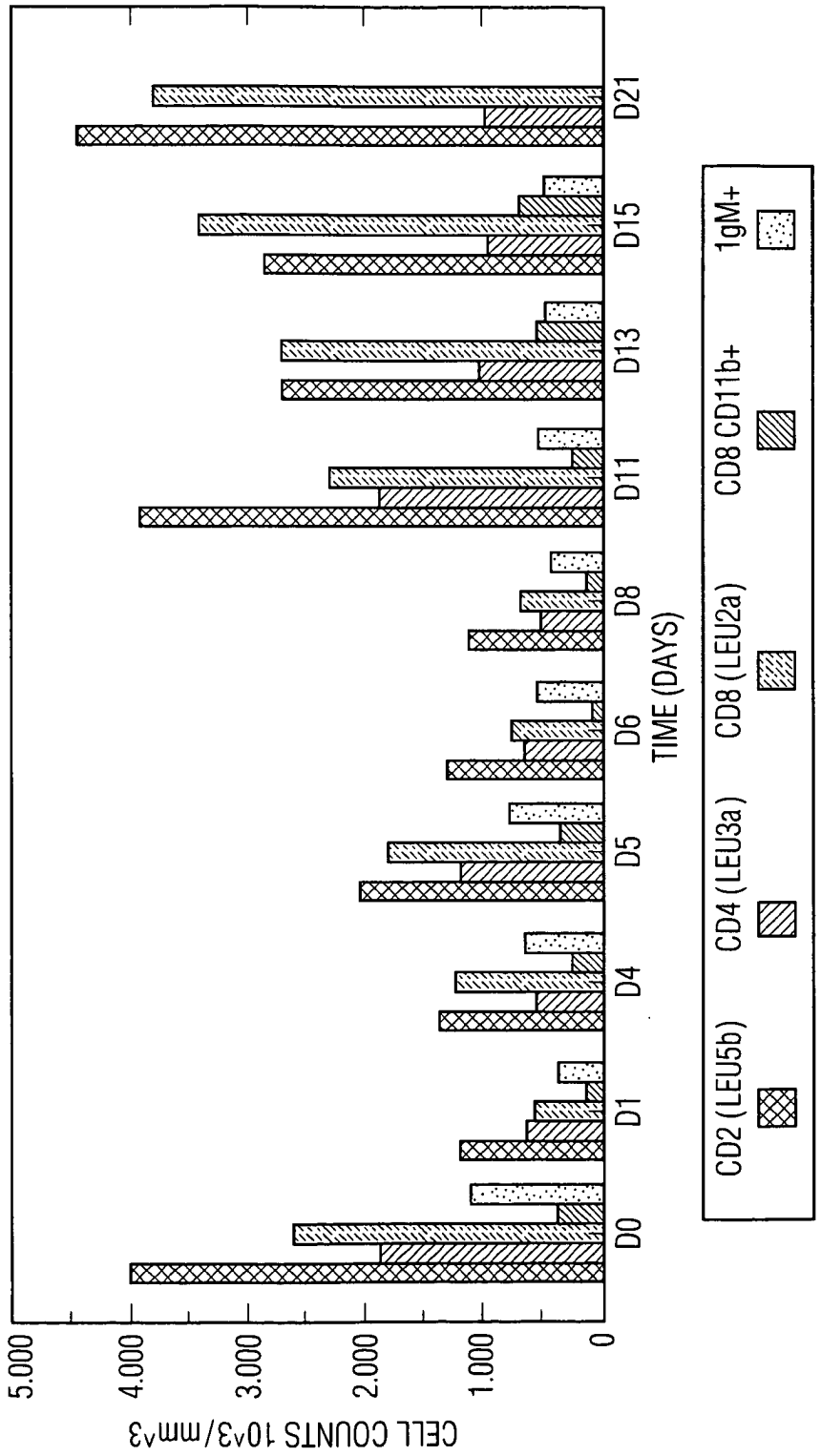

CELL COUNTS 10^3/mm^3
5.000
4.000
3.000
2.000
1.000
0
D0
D1
D4
D5
D6
D8
D11
D13
D15
D21
TIME (DAYS)
CD2 (LEU5b)
CD4 (LEU3a)
CD8 (LEU2a)
CD8 CD11b+
1gM+
1gM+: B CELLS
CD8 + CD11b+: NK CELLS

FIG. 13

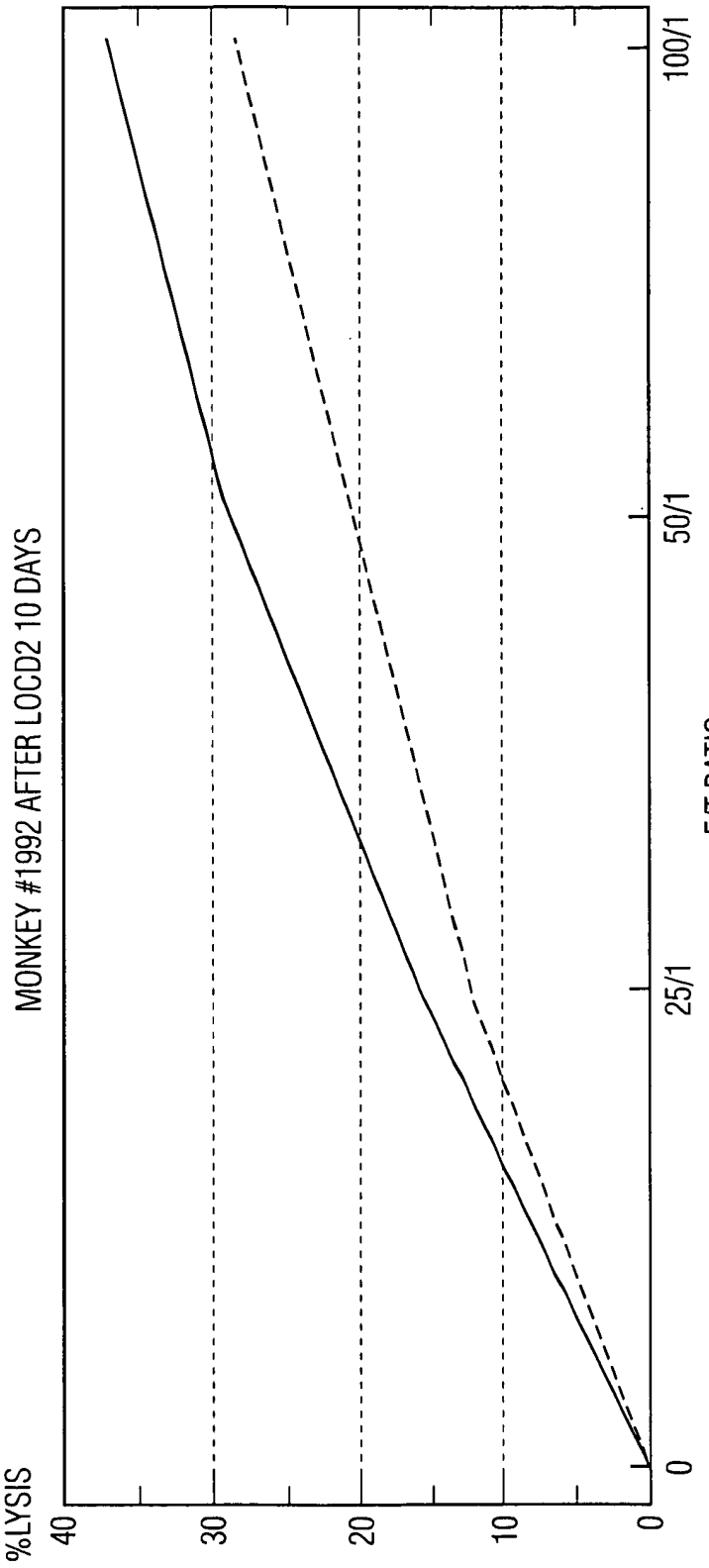

MONKEY #1992 AFTER LOCD2 10 DAYS
%LYSIS
40
30
20
10
0
0
25/1
50/1
100/1
E/T RATIO
DAY 11
DAY 22

FIG. 14

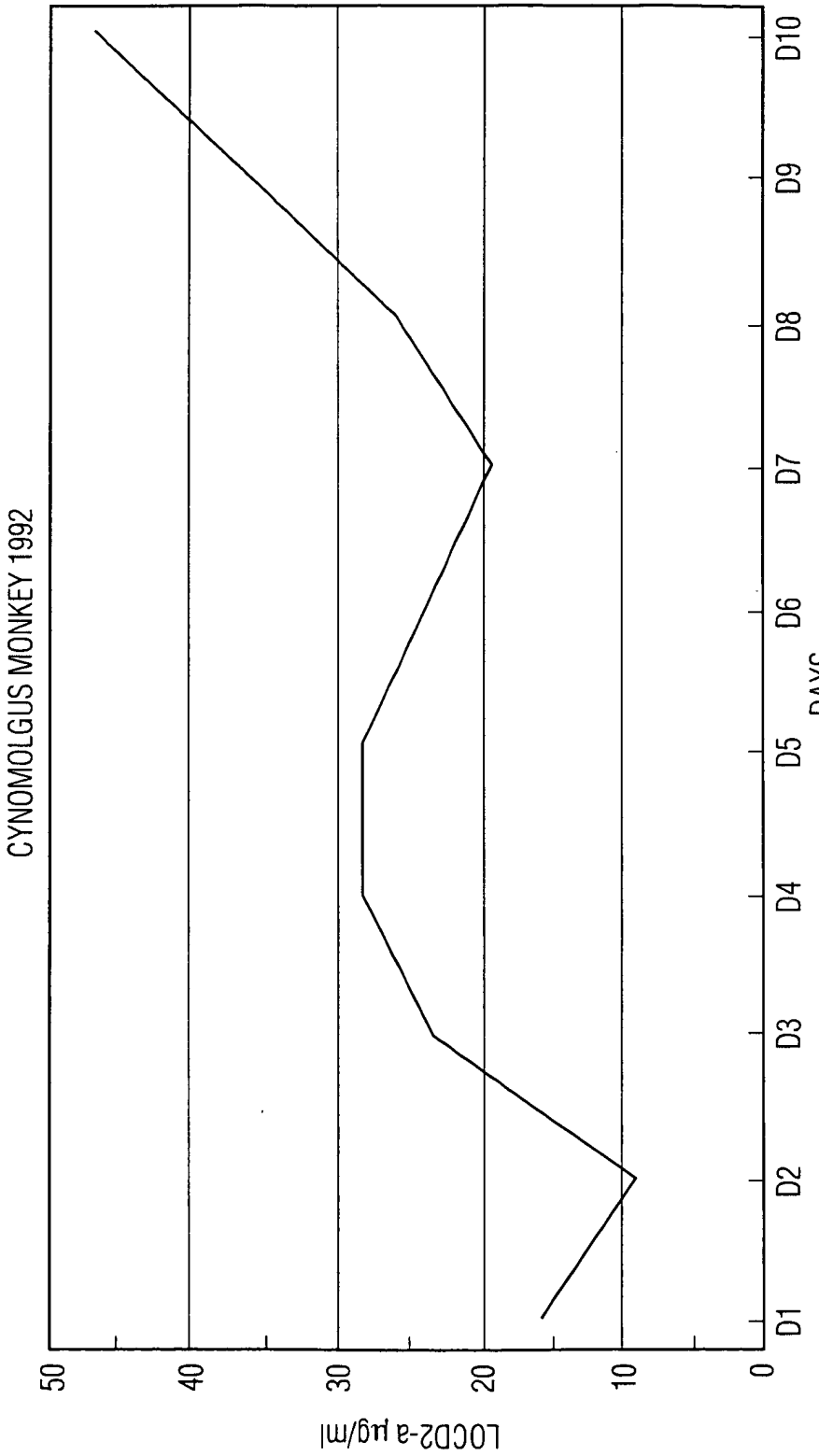

CYNOMOLGUS MONKEY 1992
LOCD2-a µg/ml
0
10
20
30
40
50
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
DAYS

FIG. 15

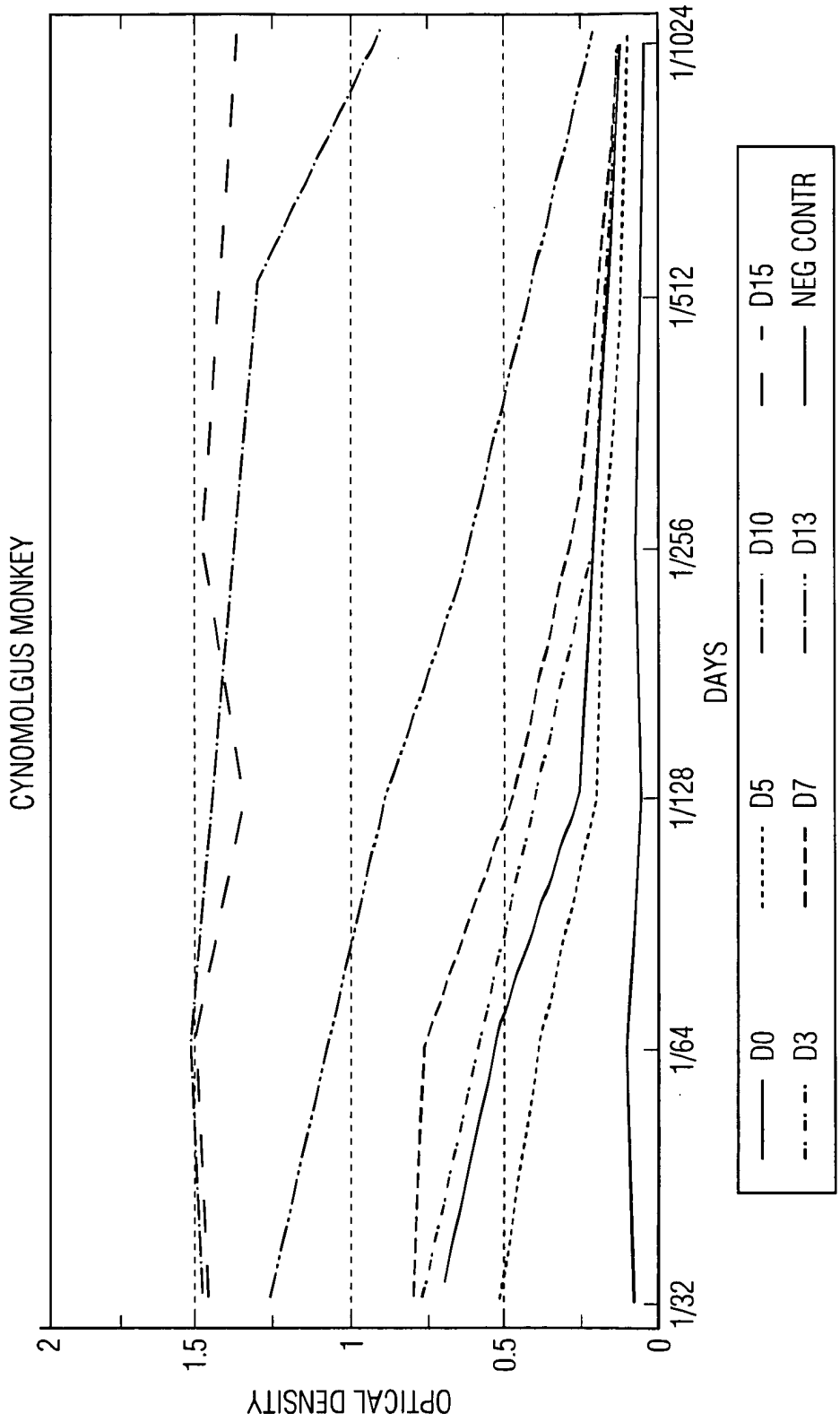

CYNOMOLGUS MONKEY
OPTICAL DENSITY
2
1.5
1
0.5
0
1/32
1/64
1/128
1/256
1/512
1/1024
DAYS
D0
D3
D5
D7
D10
D13
D15
NEG CONTR

FIG. 16

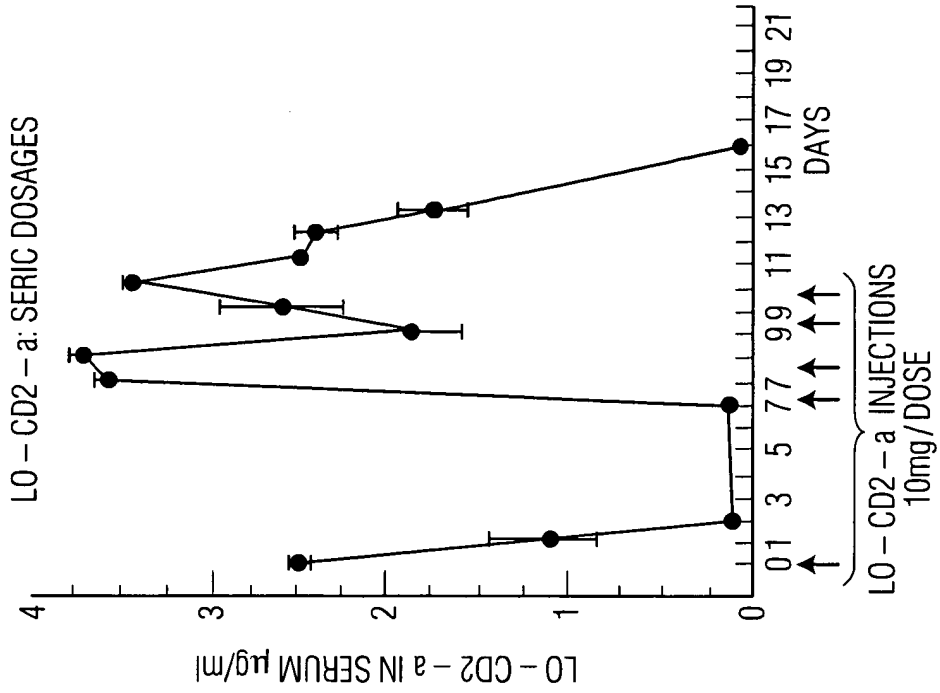


FIG. 17B

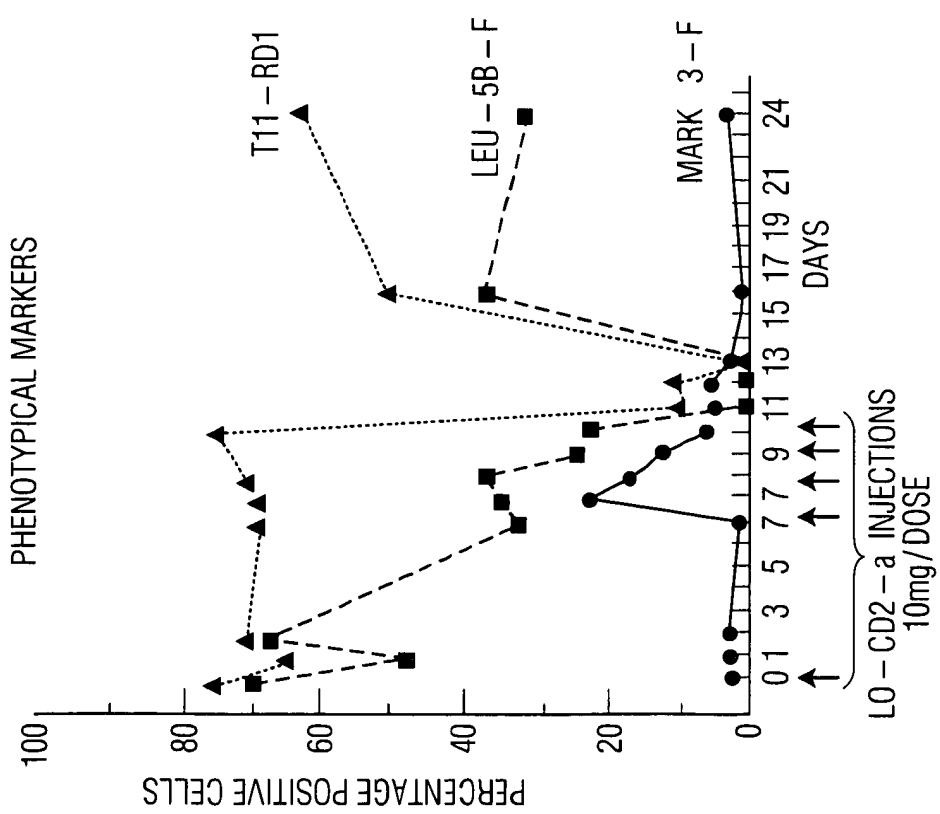


FIG. 17A

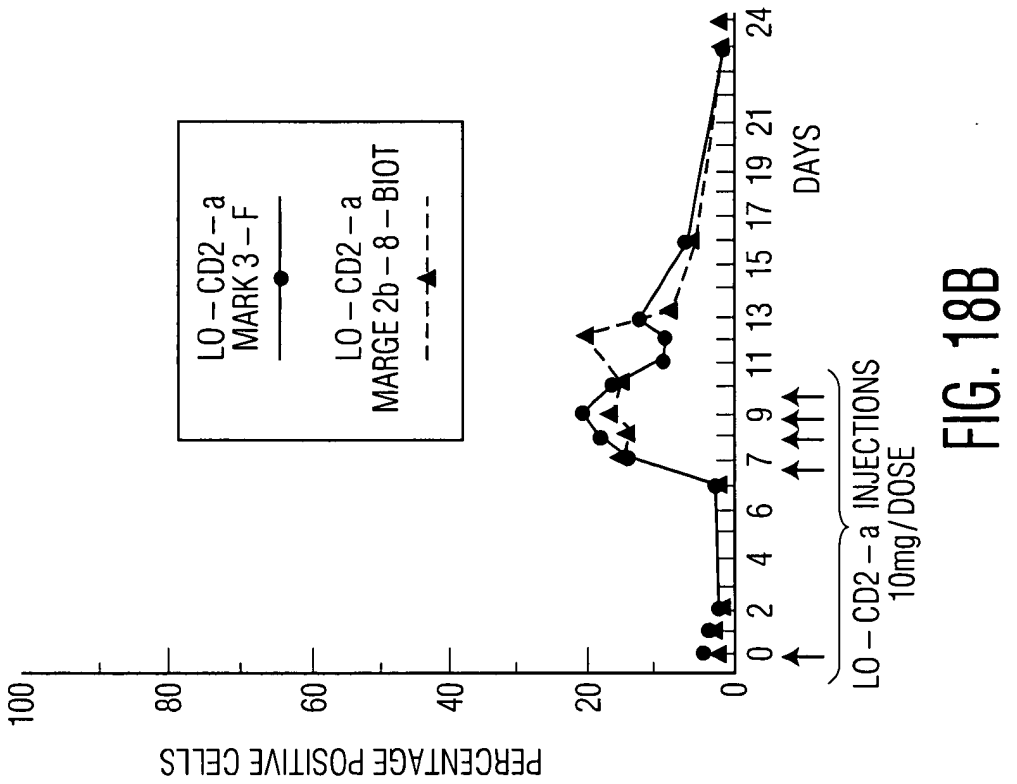


FIG. 18B

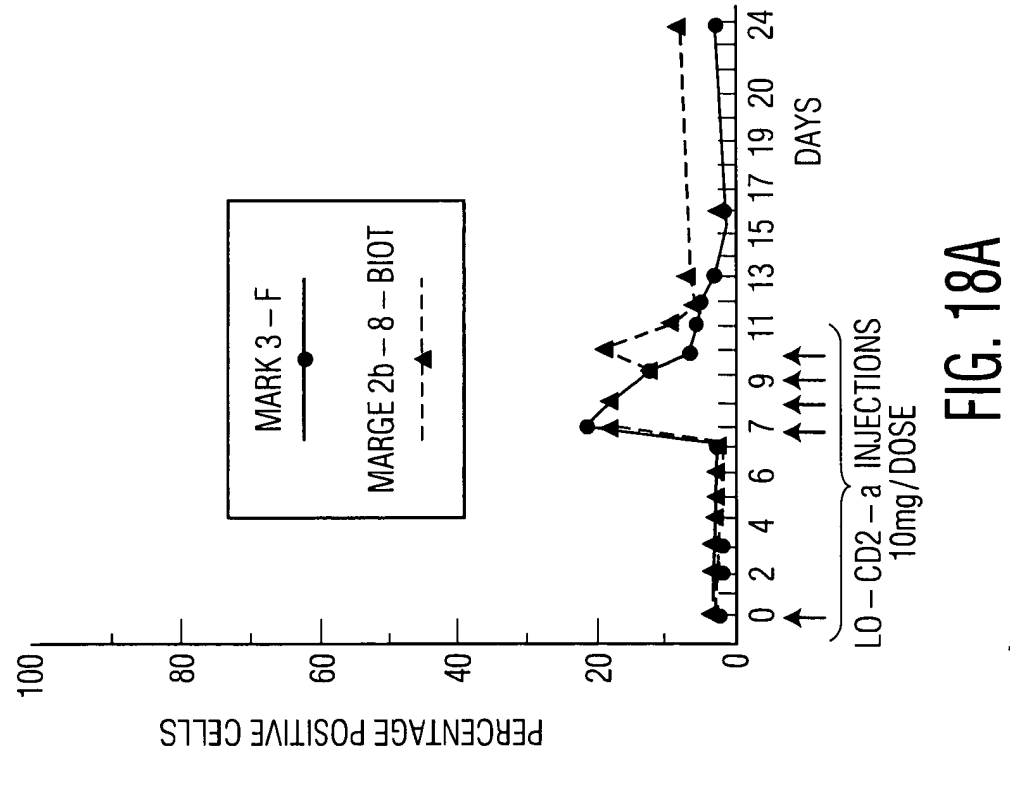


FIG. 18A

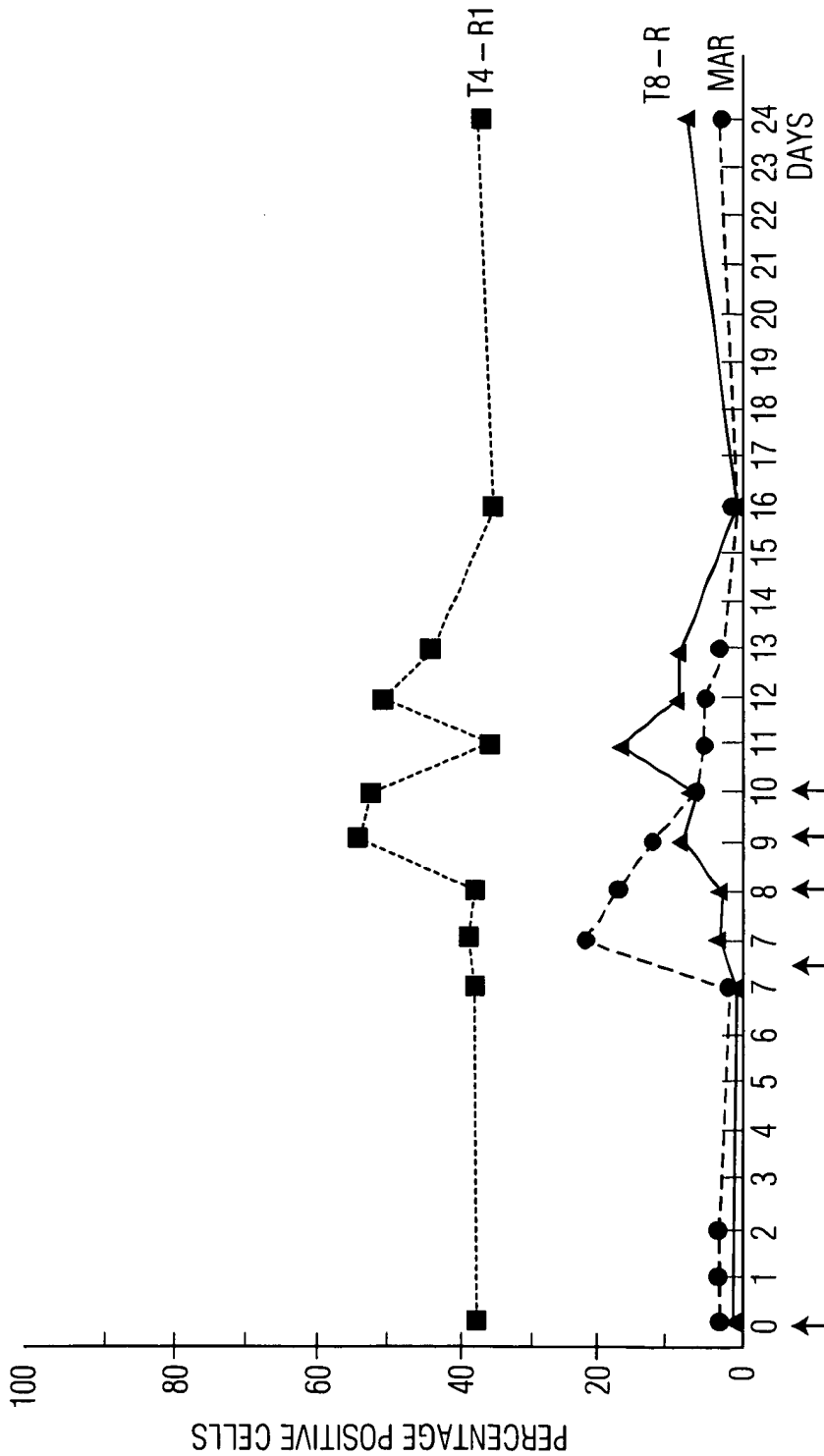

PERCENTAGE POSITIVE CELLS
100
80
60
40
20
0
T4 – R1
T8 – R
MAR
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
DAYS
LO – CD2 – a INJECTIONS
10mg/DOSE

FIG. 19

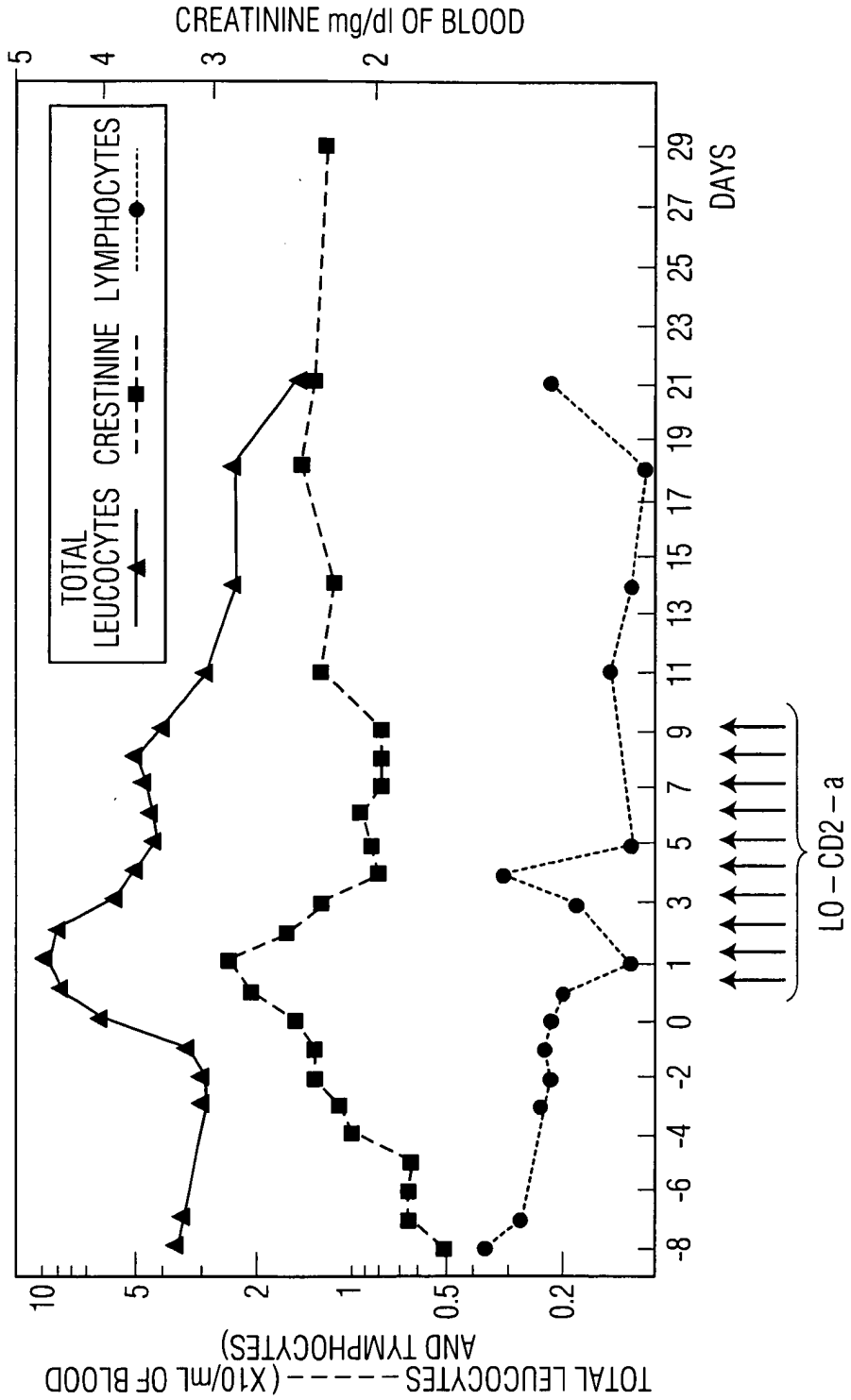

CREATININE mg/dl OF BLOOD
5
4
3
2
TOTAL LEUCOCYTES
CRESTININE
LYMPHOCYTES
-8
-6
-4
-2
0
1
3
5
7
9
11
13
15
17
19
21
23
25
27
29
DAYS
LO – CD2 – a
TOTAL LEUCOCYTES - - - - - (X10/mL OF BLOOD AND TYMPHOCYTES)
10
5
2
1
0.5
0.2

FIG. 20

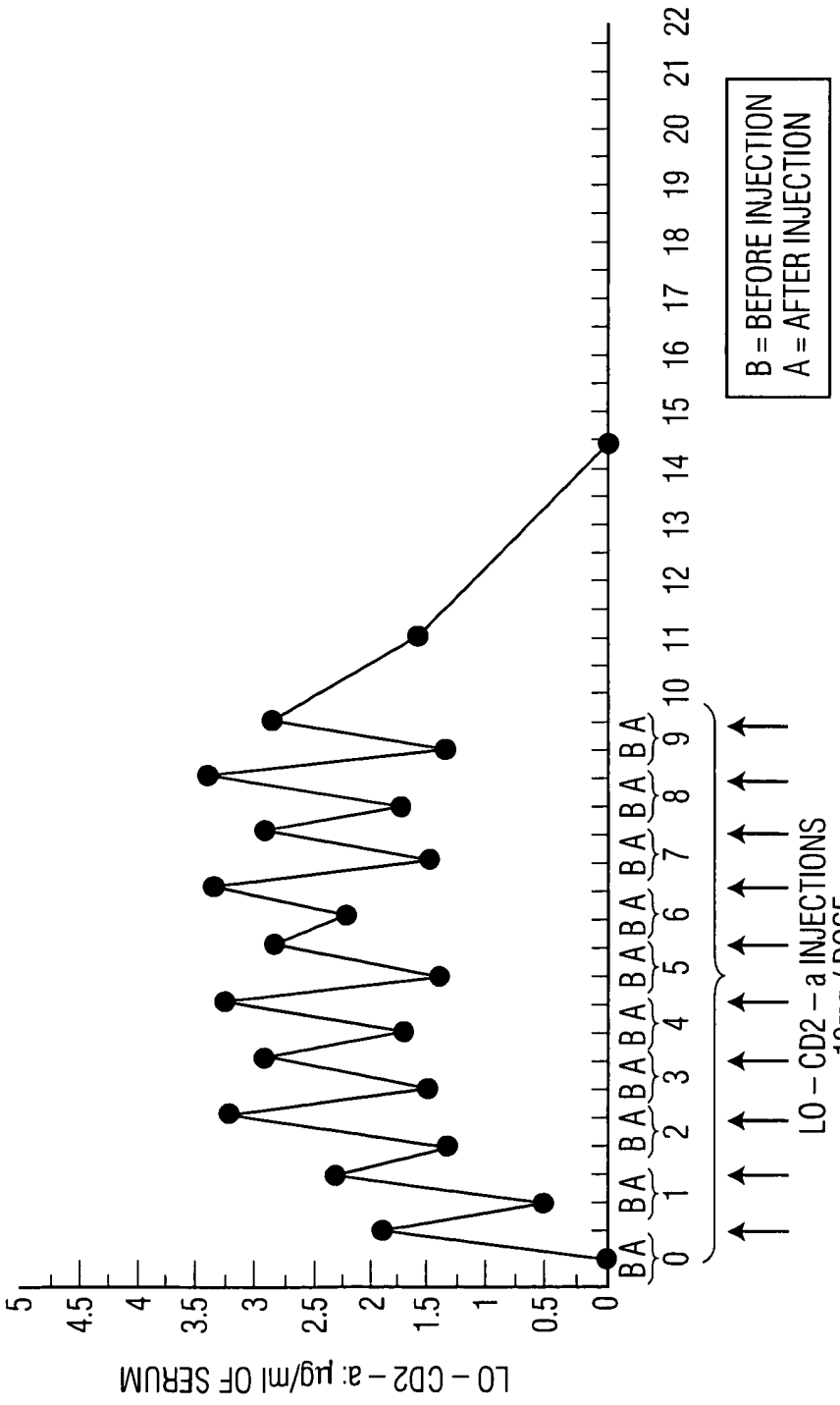

LO – CD2 – a: µg/ml OF SERUM
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
BA BA BA BA BA BA BA BA BA BA
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
LO – CD2 – a INJECTIONS
10mg / DOSE
B = BEFORE INJECTION
A = AFTER INJECTION

FIG. 21

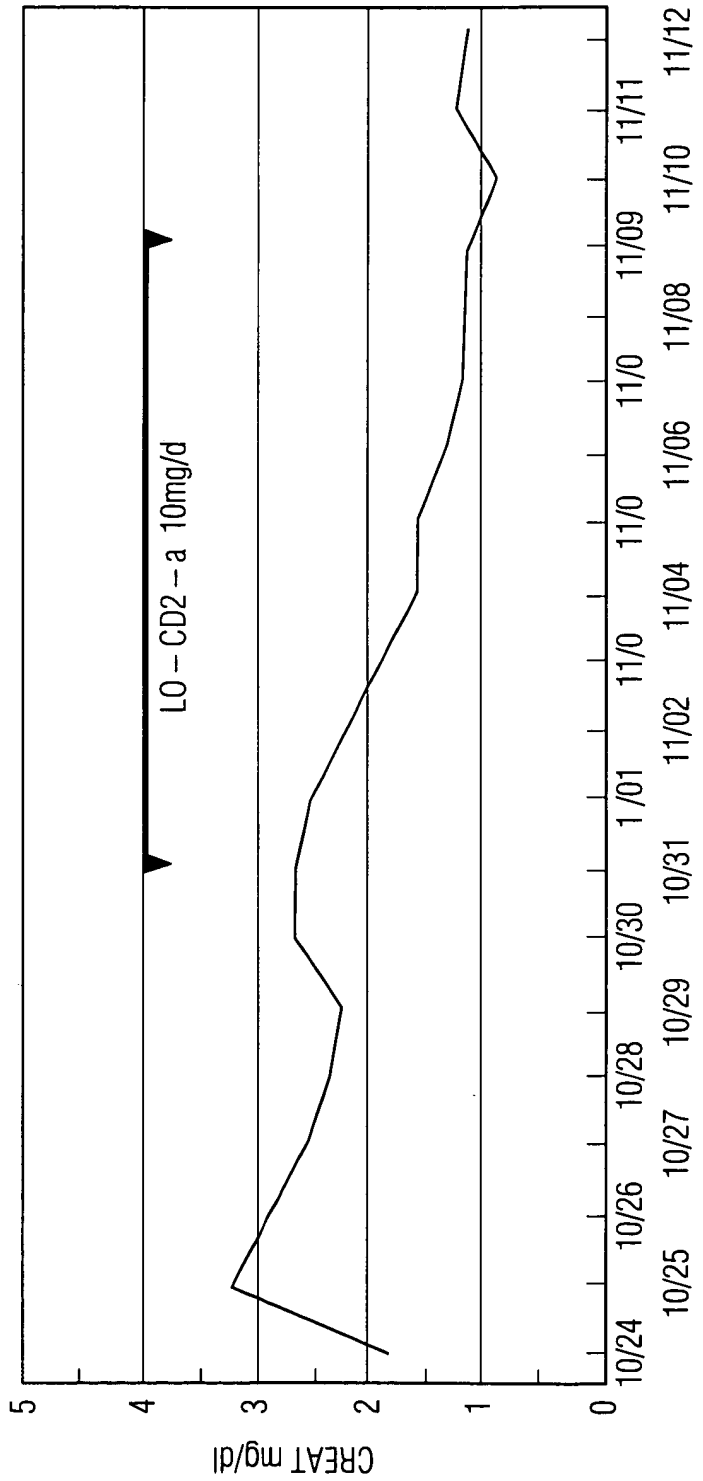

LO – CD2 – a 10mg/d
CREAT mg/dl
0
1
2
3
4
5
10/24
10/25
10/26
10/27
10/28
10/29
10/30
10/31
1 /01
11/02
11/0
11/04
11/0
11/06
11/0
11/08
11/09
11/10
11/11
11/12
DAYS
CREAT

FIG. 22

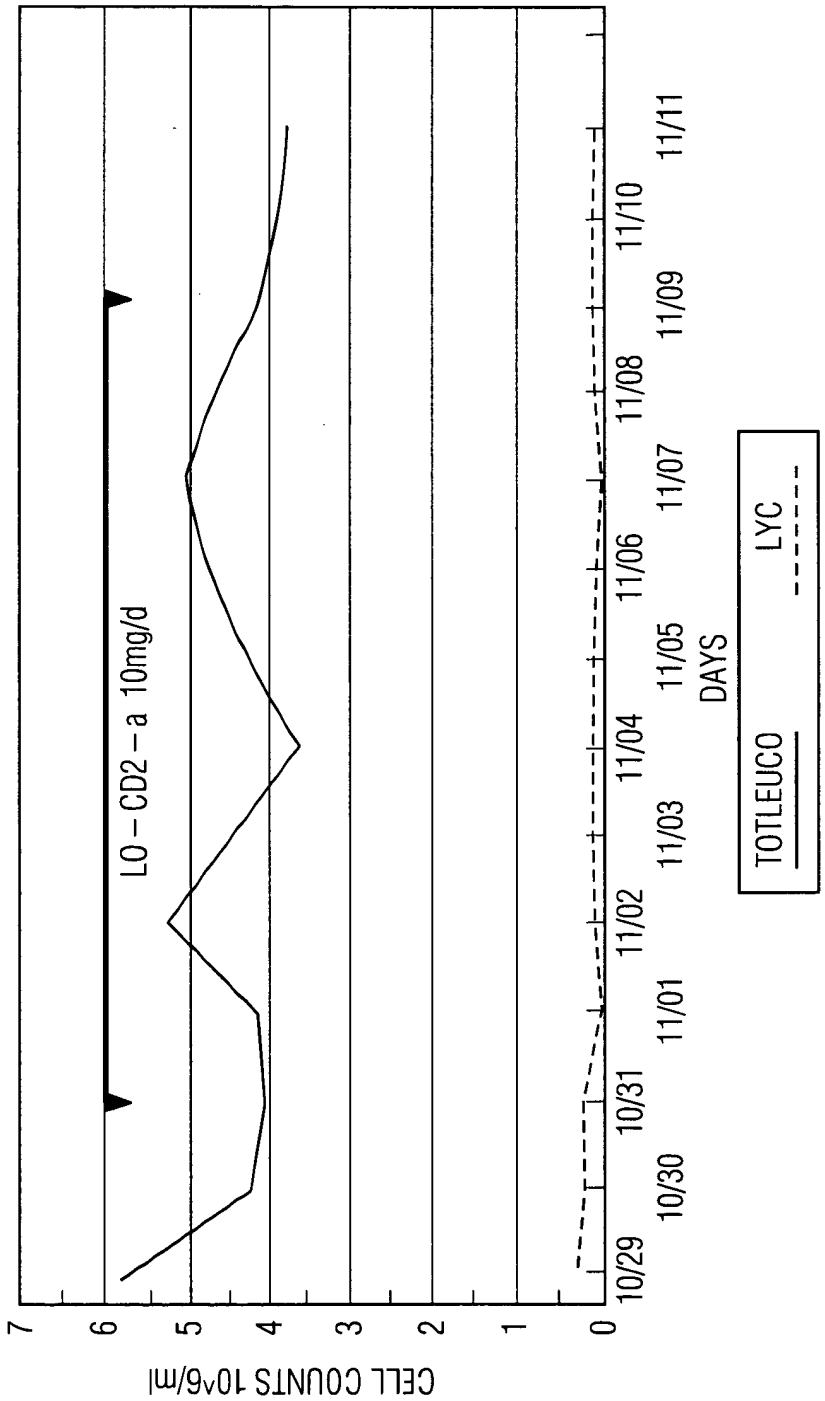

CELL COUNTS 10^6/ml
7
6
5
4
3
2
1
0
LO – CD2 – a 10mg/d
10/29
10/30
10/31
11/01
11/02
11/03
11/04
11/05
11/06
11/07
11/08
11/09
11/10
11/11
DAYS
TOTLEUCO
LYC

FIG. 23

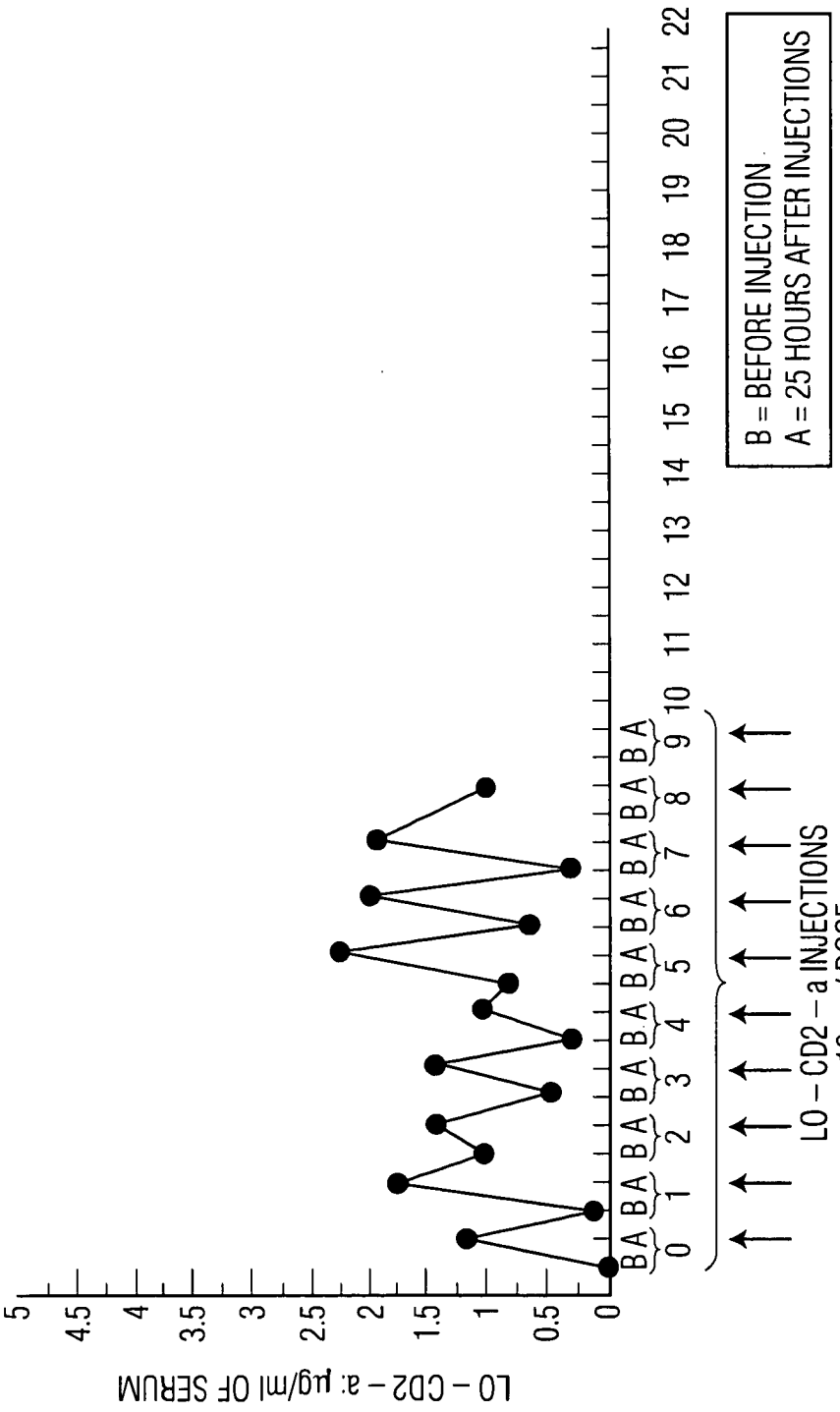

LO – CD2 – a: µg/ml OF SERUM
5
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
BA BA BA BA BA BA BA BA BA BA
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
LO – CD2 – a INJECTIONS
10mg / DOSE
B = BEFORE INJECTION
A = 25 HOURS AFTER INJECTIONS

FIG. 24

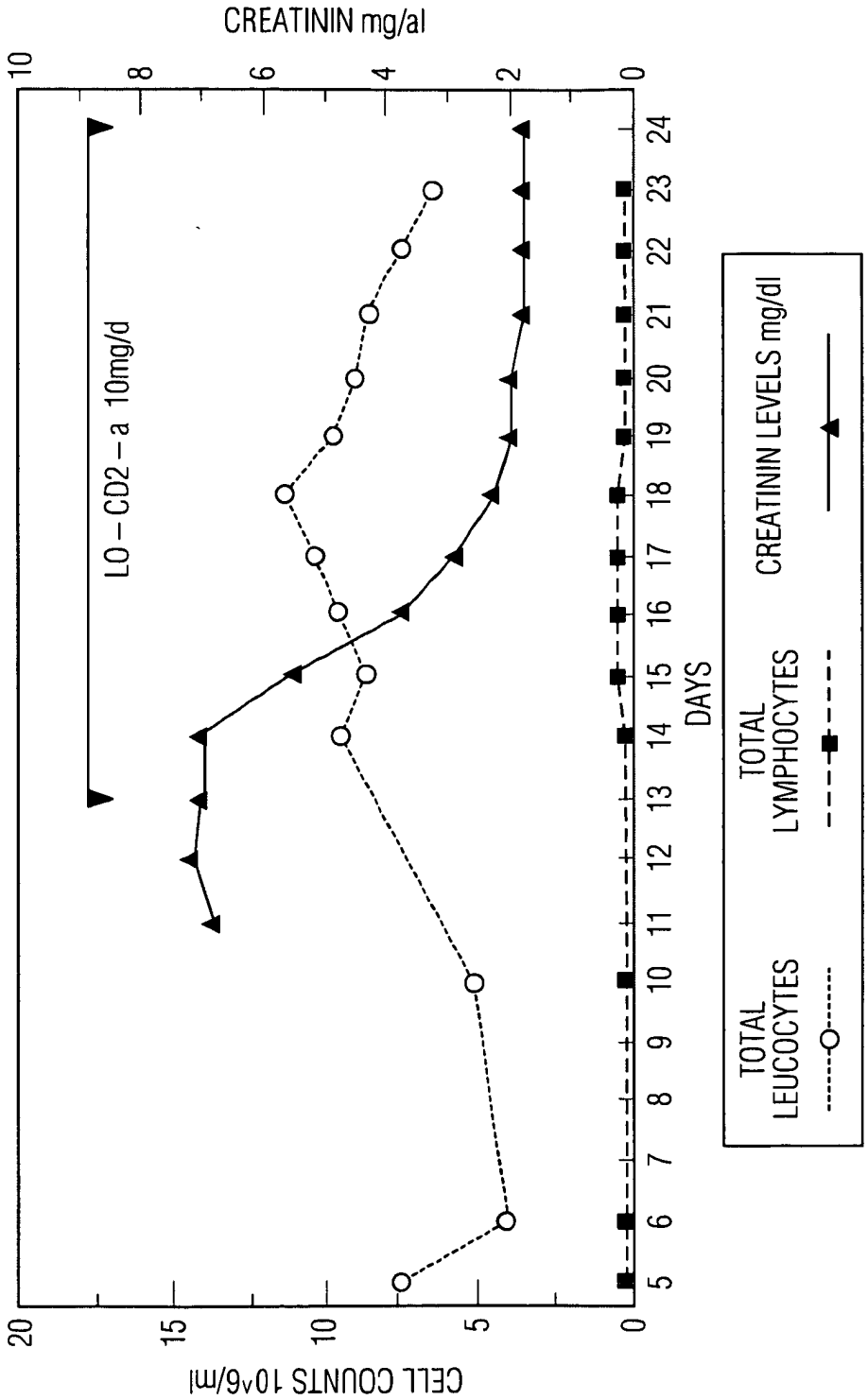

CREATININ mg/al
CELL COUNTS 10^6/ml
DAYS
L0 – CD2 – a 10mg/d
TOTAL LEUCOCYTES
TOTAL LYMPHOCYTES
CREATININ LEVELS mg/dl

FIG. 25

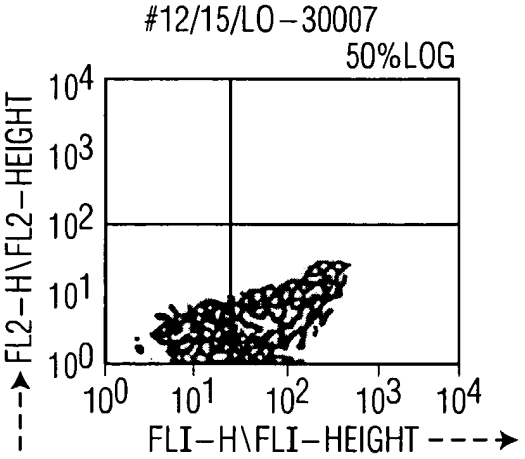


FIG. 26A

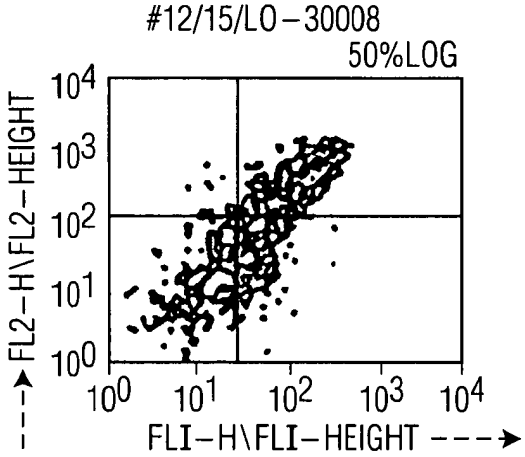


FIG. 26B

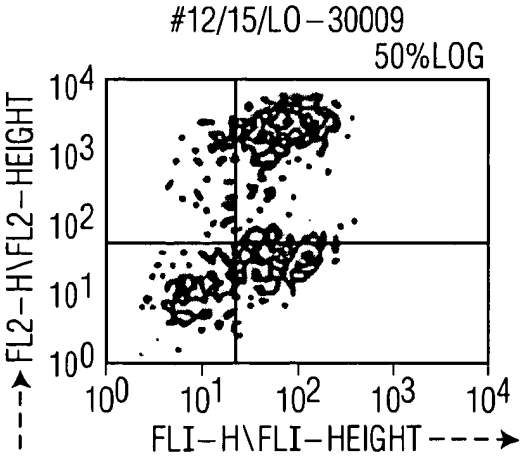


FIG. 26C

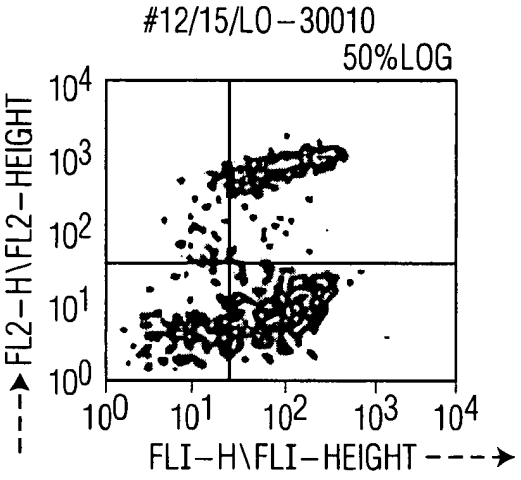


FIG. 26D

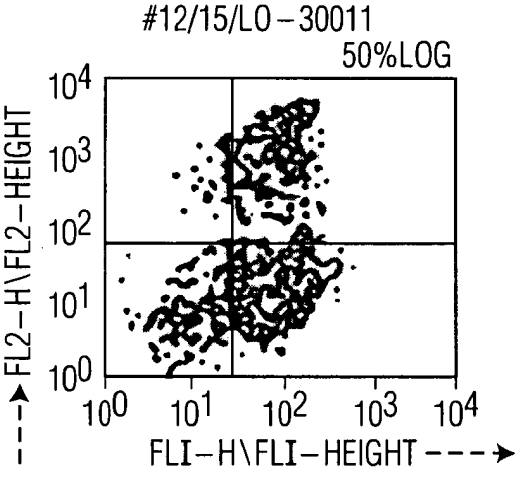


FIG. 26E

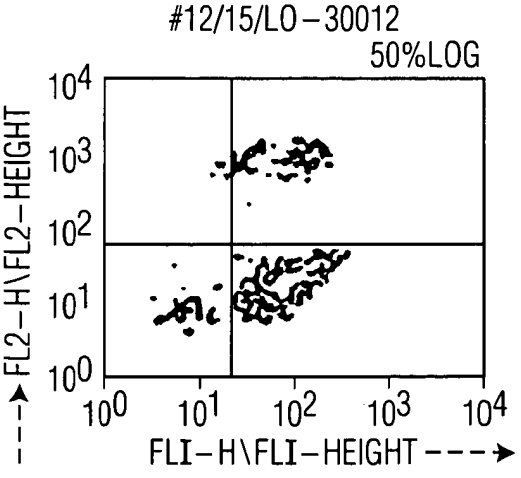


FIG. 26F

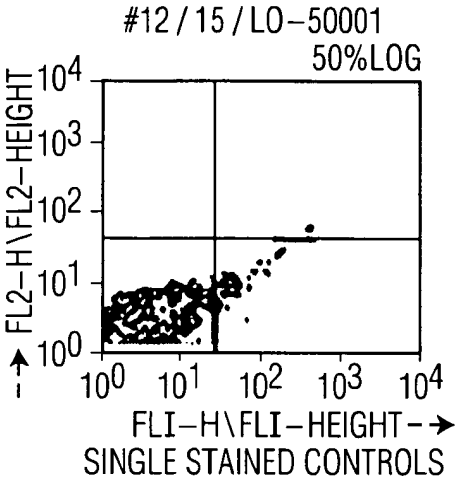


FIG. 26G

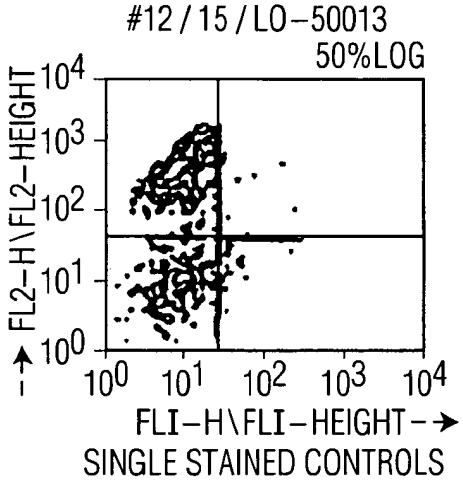


FIG. 26H

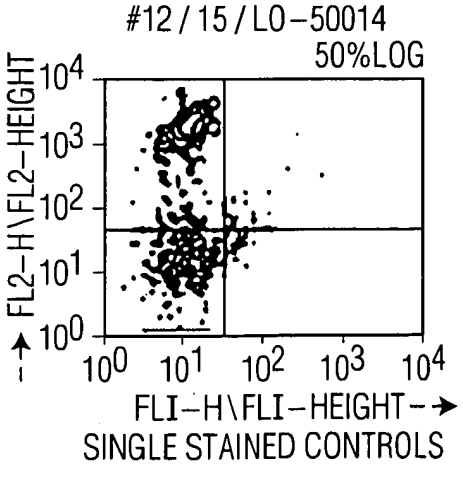


FIG. 26I

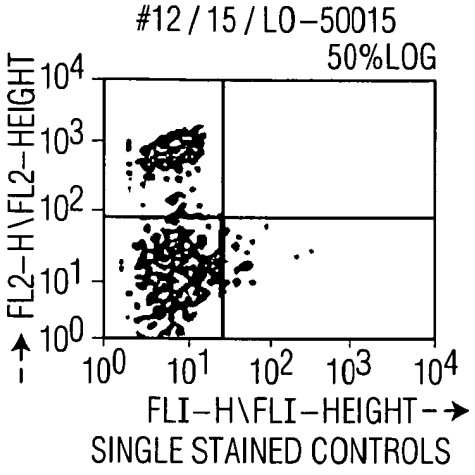


FIG. 26J

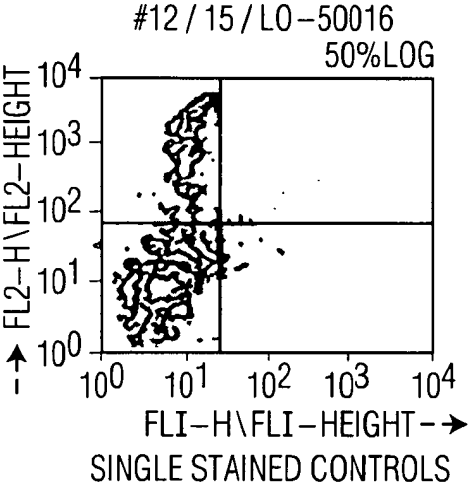


FIG. 26K

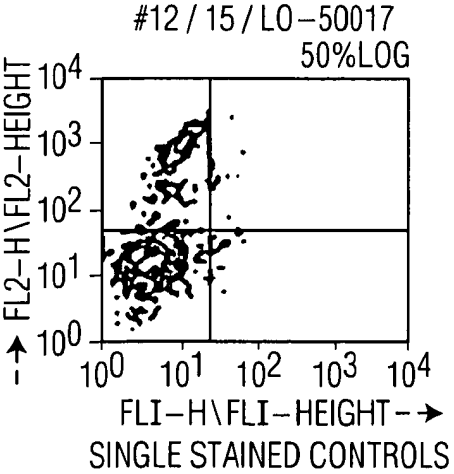


FIG. 26L

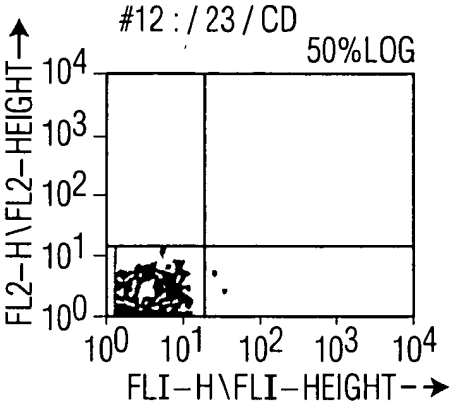


FIG. 27A

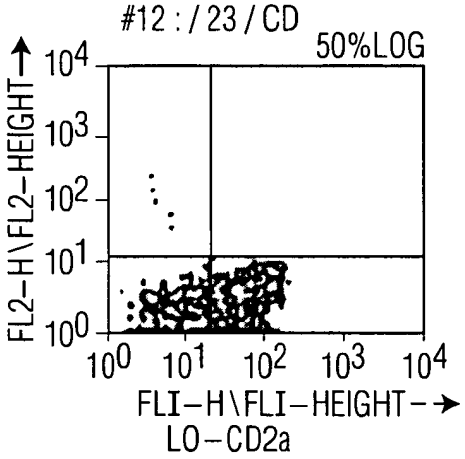


FIG. 27B

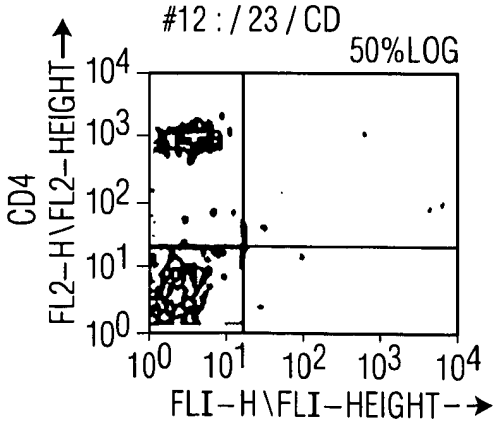


FIG. 27C

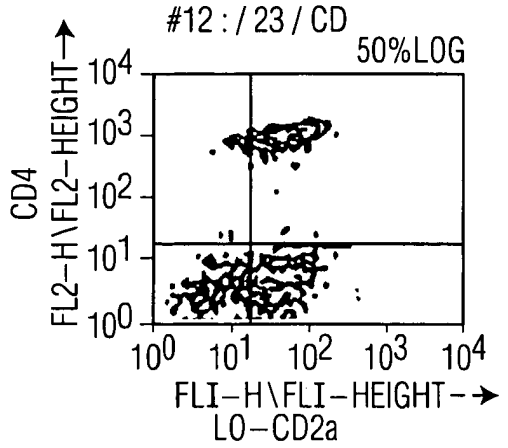


FIG. 27D

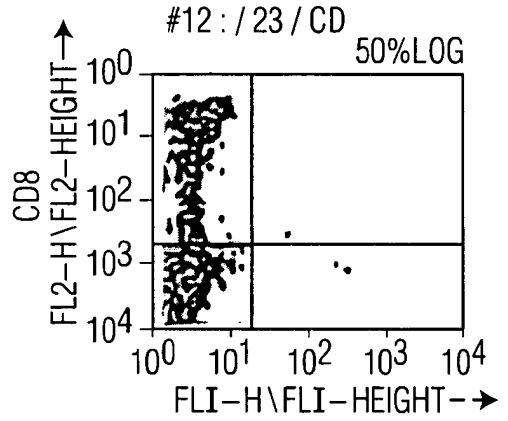


FIG. 27E

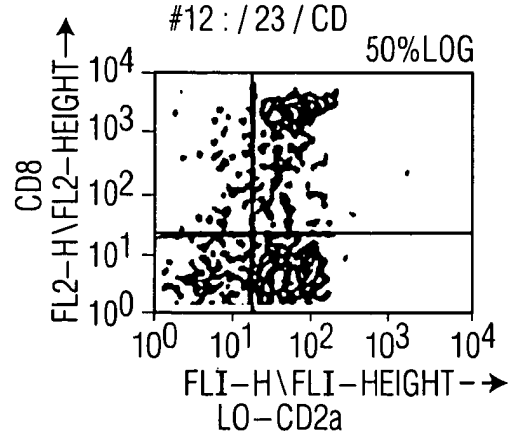


FIG. 27F

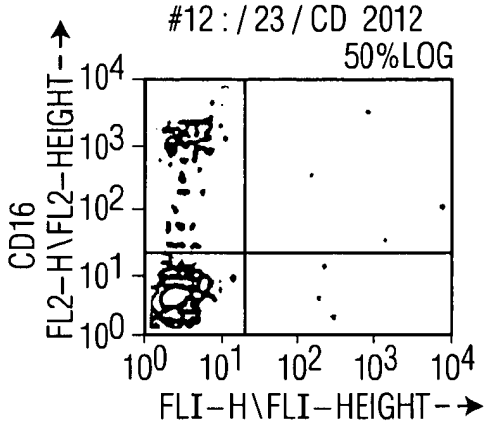


FIG. 27G

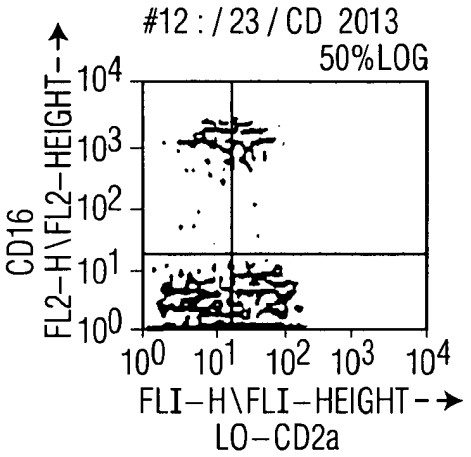


FIG. 27H

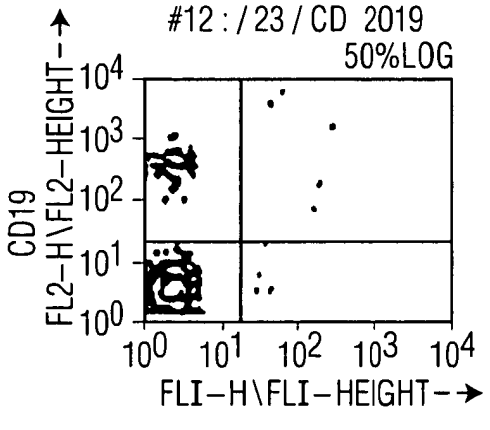


FIG. 27I

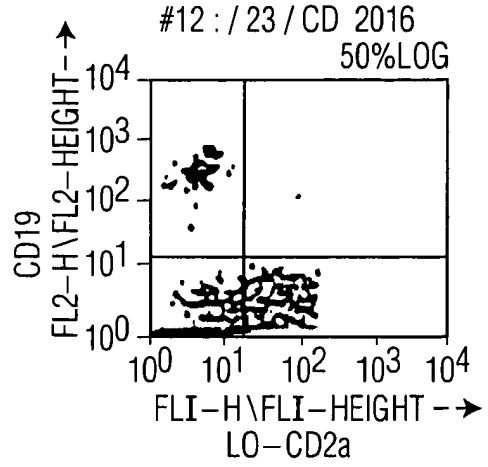


FIG. 27J

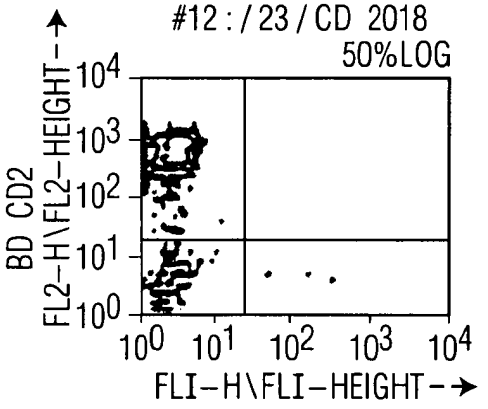


FIG. 27K

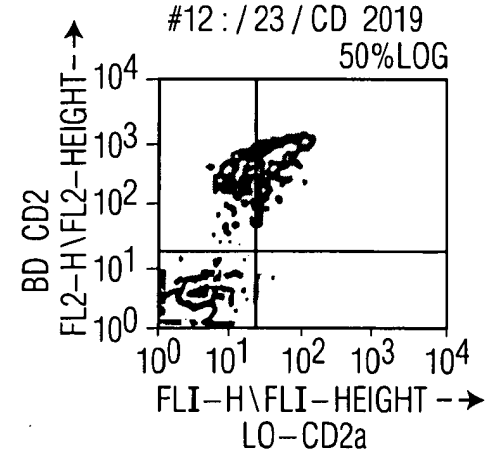


FIG. 27L

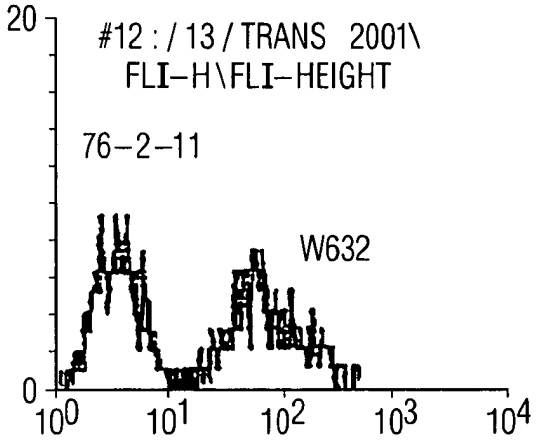


FIG. 28A

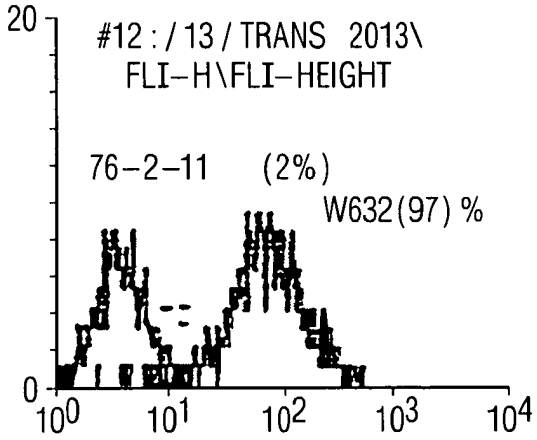


FIG. 28B

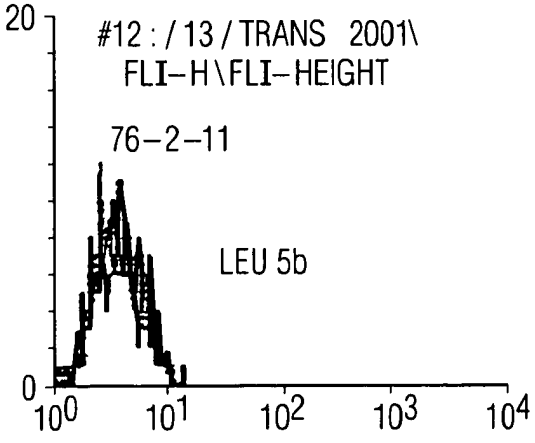


FIG. 28C

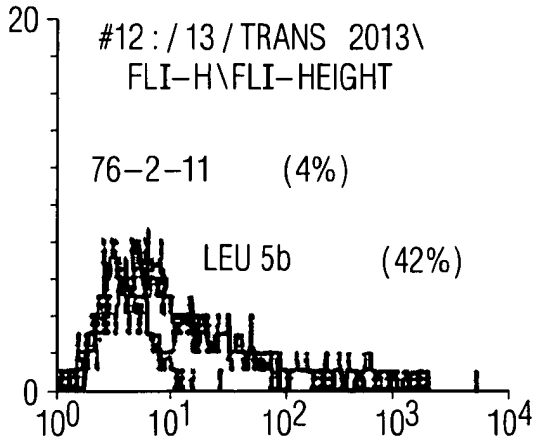


FIG. 28D

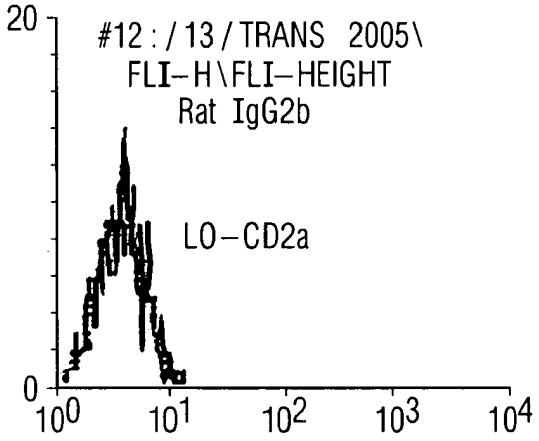


FIG. 28E

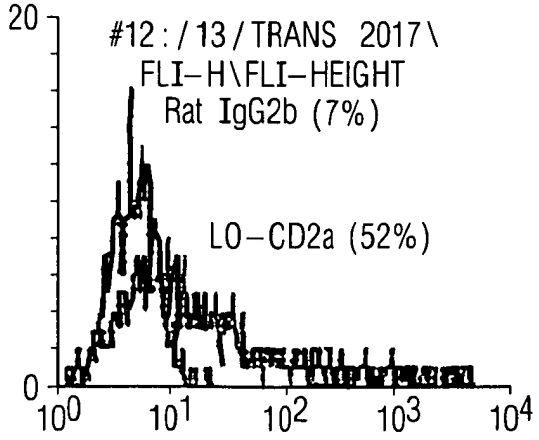


FIG. 28F

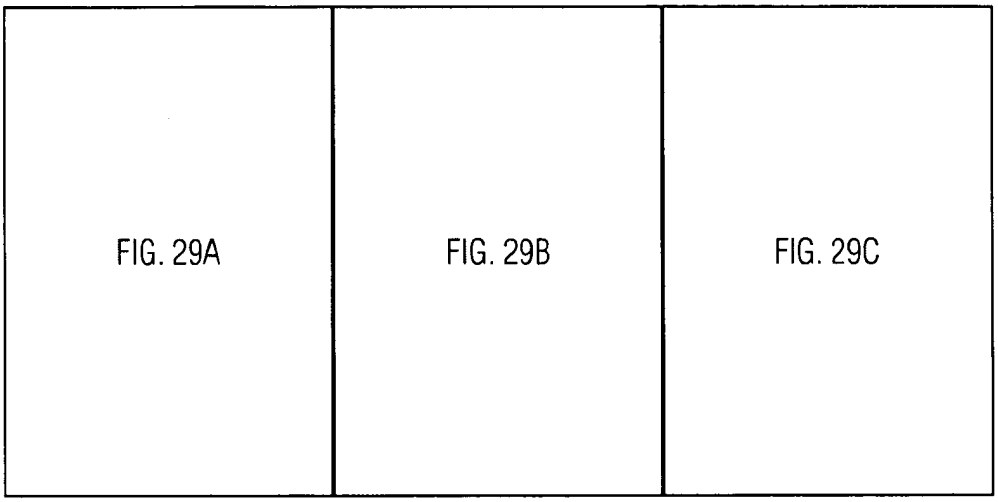


FIG. 29

```
          10          20          30
     *    *    *    *    *    *    *
ATGATGAGTCCTGTCCAGTCCCTGTTTCTGTTATT
 M   M   S   P   V   Q   S   L   F   L   L   L

          110         120         130
     *    *    *    *    *    *    *
GACTGCCCATGTTGGCTGTCCATGTGTGGTAAGGC

          210         220         230
     *    *    *    *    *    *    *
ATAGGATTTGTGCTAAGAGGATTCTAATGTAGATG

          310         320         330
     *    *    *    *    *    *    *
TTAAAAATCACAAAACACACCGGGATCTCACAGGA

          410         420         430
     *    *    *    *    *    *    *
TATTATAATTTCAGGAACCAATGGTGATGTTGTGC
                     T   N   G   D   V   V

          510         520         530
     *    *    *    *    *    *    *
AGTCAGAGTCTCTTACATAGTAGTGGAAACACCTA
 S   Q   S   L   L   H   S   S   G   N   T   Y

          610         620         630
     *    *    *    *    *    *    *
TGGAATCTGGGGTCCCCAACAGGTTCAGTGGCAGT
L   E   S   G   V   P   N   R   F   S   G   S

          710         720         730
     *    *    *    *    *    *    *
CTGCATGCAATTTACCCATTATCCGTATACGTTTG
  C   M   Q   F   T   H   Y   P   Y   T   F
```

FIG. 29A

```
   40          50          60          70
    *     *     *     *     *     *     *
GCTTTGGATTCTGGGTAAGTAGAGAATGAGTTACA
  L   W   I   L   G

  140         150         160         170
    *     *     *     *     *     *     *
AGGTCCTATTTTCTAAGATGGACACTTGAGATTCC

  240         250         260         270
    *     *     *     *     *     *     *
AGAAGGTGTATGCCATTTAGGATCTGCAACCGAAT

  340         350         360         370
    *     *     *     *     *     *     *
AATGAGTAACAAAAAGTAATTCACAAAGATTGGTT

  440         450         460         470
    *     *     *     *     *     *     *
TGACCCAGACTCCACCTACTTTATTGGCTACCATT
L   T   Q   T   P   P   T   L   L   A   T   I

  540         550         560         570
    *     *     *     *     *     *     *
TTTAAATTGGTTGCTACAGAGGACAGGCCAATCTC
  L   N   W   L   L   Q   R   T   G   Q   S

  640         650         660         670
    *     *     *     *     *     *     *
GGGTCAGGAACAGATTTCACACTCAAAATCAGTGG
 G   S   G   T   D   F   T   L   K   I   S   G

  740         750         760
    *     *     *     *     *
GAGCTGGGACCAAGCTGGAACTGAAA
G   A   G   T   K   L   E   L   K>
```

FIG. 29B

```
          80          90          100
     *    *     *     *     *     *
GGACAAGAATGGGGATGGAGGATGAGTTCT


          180         190         200
     *    *     *     *     *     *
ATTACTTGATAATGAGAAATTACAGATGAG

          280         290         300
     *    *     *     *     *     *
TGTTTTGTGAAAAAGCATTTGGTATATTTT

          380         390         400
     *    *     *     *     *     *
GCAAATTTTGCACATAACTTTGTTCTGATC

          480         490         500
     *    *     *     *     *     *
GGACAATCAGTCTCCATCTCTTGCAGGTCA
 G   Q   S   V   S   I   S   C   R   S>

          580         590         600
     *    *     *     *     *     *
CACAGCCGCTAATTTATTTGGTATCCAAAC
P   Q   P   L   I   Y   L   V   S   K>

          680         690         700
     *    *     *     *     *     *
AGTGGAAGTTGAGGATTTGGGGGTTTATTA
  V   E   A   E   D   L   G   V   Y   Y>
```

FIG. 29C

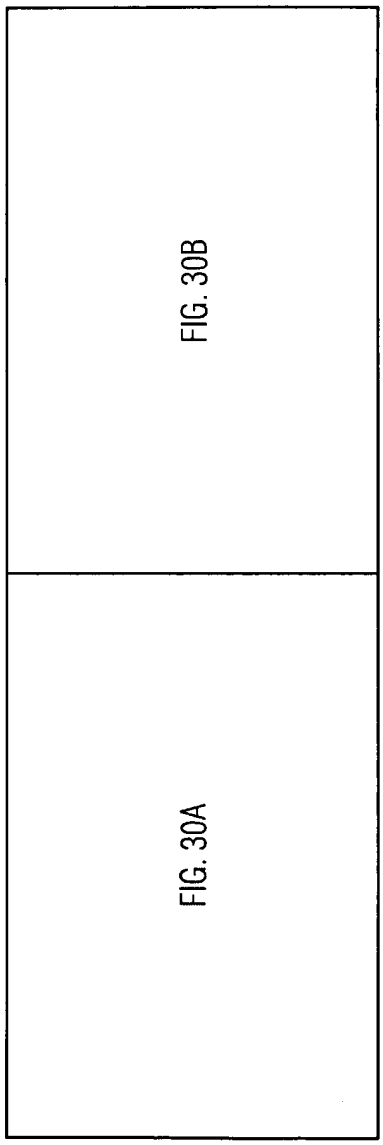


FIG. 30

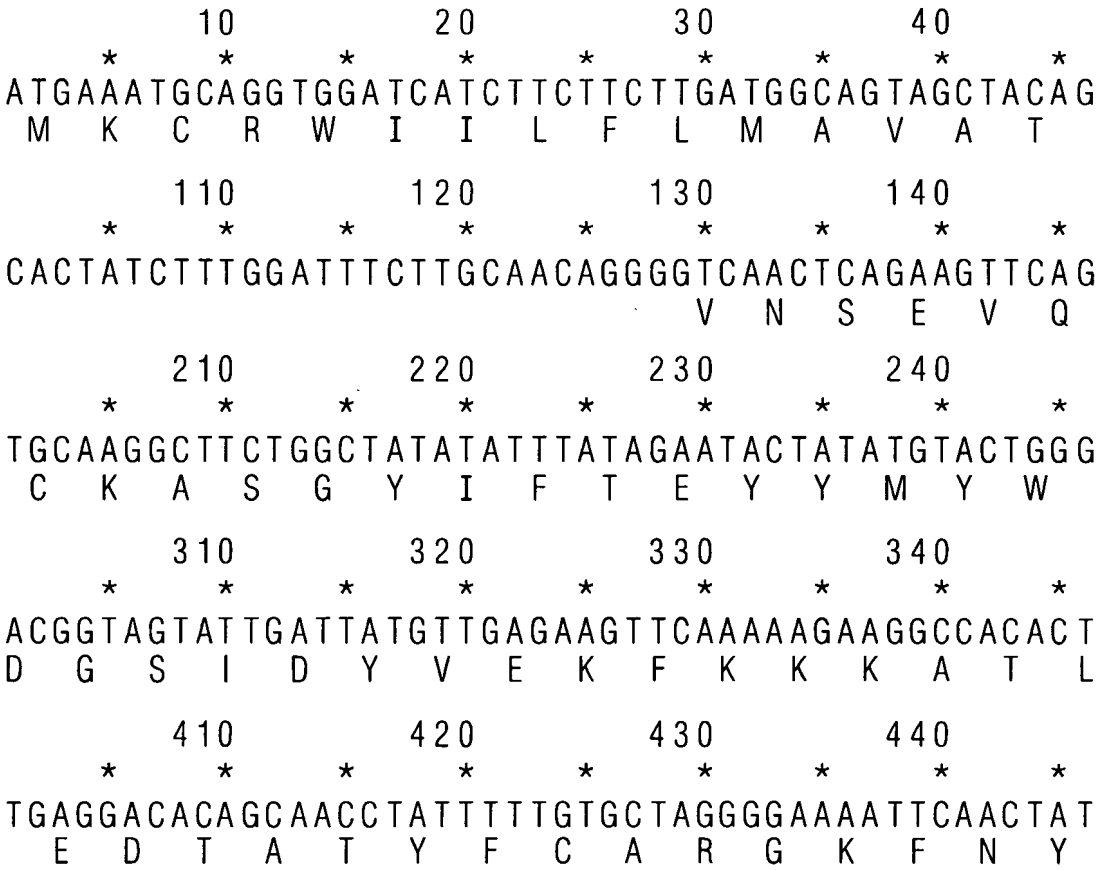
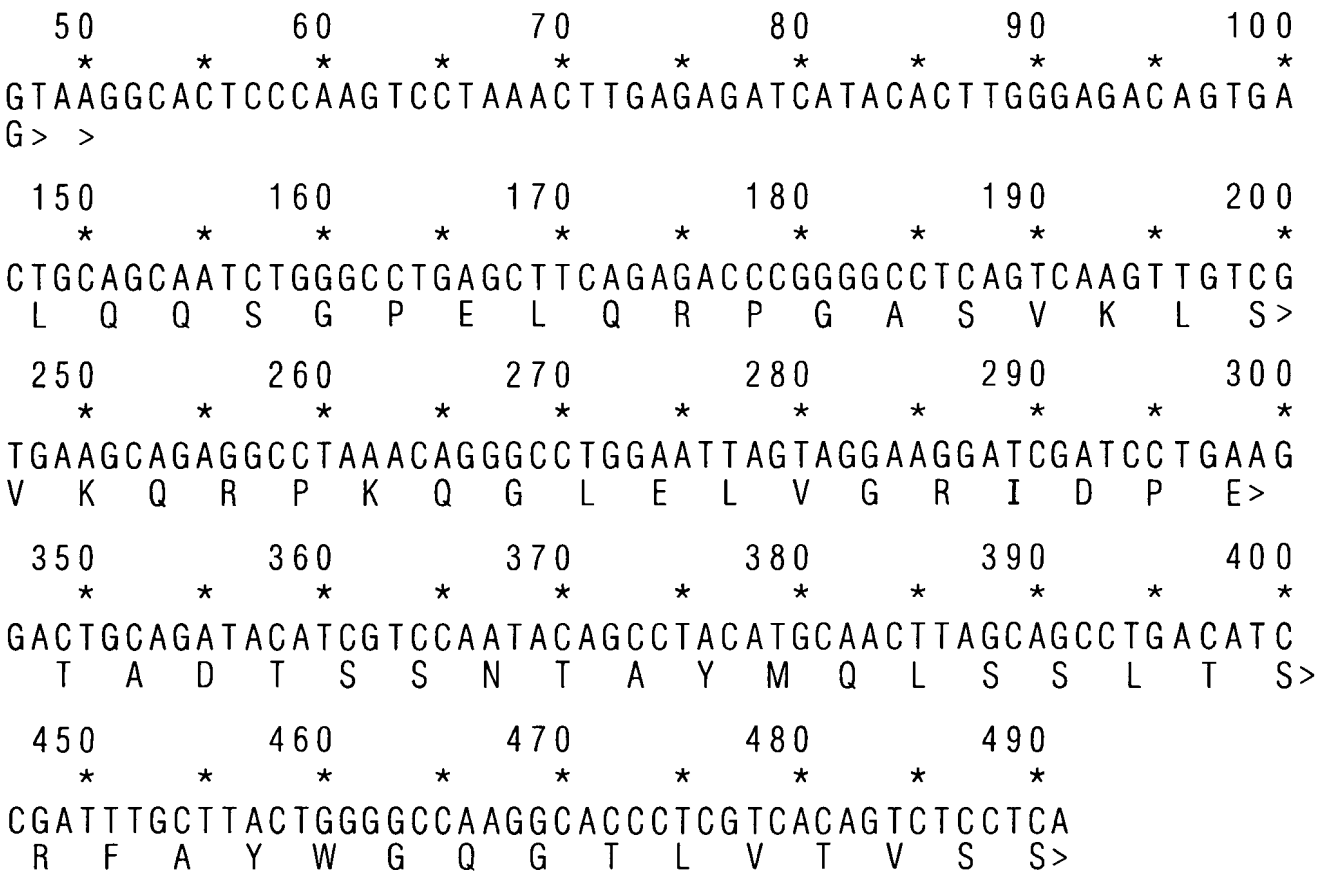

10 20 30 40
ATGAAATGCAGGTGGATCATCTTCTTCTTGATGGCAGTAGCTACAG
M K C R W I I L F L M A V A T
110 120 130 140
CACTATCTTTGGATTTCTTGCAACAGGGGTCAACTCAGAAGTTCAG
V N S E V Q
210 220 230 240
TGCAAGGCTTCTGGCTATATATTTATAGAATACTATATGTACTGGG
C K A S G Y I F T E Y Y M Y W
310 320 330 340
ACGGTAGTATTGATTATGTTGAGAAGTTCAAAAAGAAGGCCACACT
D G S I D Y V E K F K K K A T L
410 420 430 440
TGAGGACACAGCAACCTATTTTTGTGCTAGGGGAAAATTCAACTAT
E D T A T Y F C A R G K F N Y

FIG. 30A


50 60 70 80 90 100
GTAAGGCACTCCCAAGTCCTAAACTTGAGAGATCATACACTTGGGAGACAGTGA
G> >
150 160 170 180 190 200
CTGCAGCAATCTGGGCCTGAGCTTCAGAGACCCGGGGCCTCAGTCAAGTTGTCG
L Q Q S G P E L Q R P G A S V K L S>
250 260 270 280 290 300
TGAAGCAGAGGCCTAAACAGGGCCTGGAATTAGTAGGAAGGATCGATCCTGAAG
V K Q R P K Q G L E L V G R I D P E>
350 360 370 380 390 400
GACTGCAGATACATCGTCCAATACAGCCTACATGCAACTTAGCAGCCTGACATC
T A D T S S N T A Y M Q L S S L T S>
450 460 470 480 490
CGATTTGCTTACTGGGGCCAAGGCACCCTCGTCACAGTCTCCTCA
R F A Y W G Q G T L V T V S S>
FIG. 30B

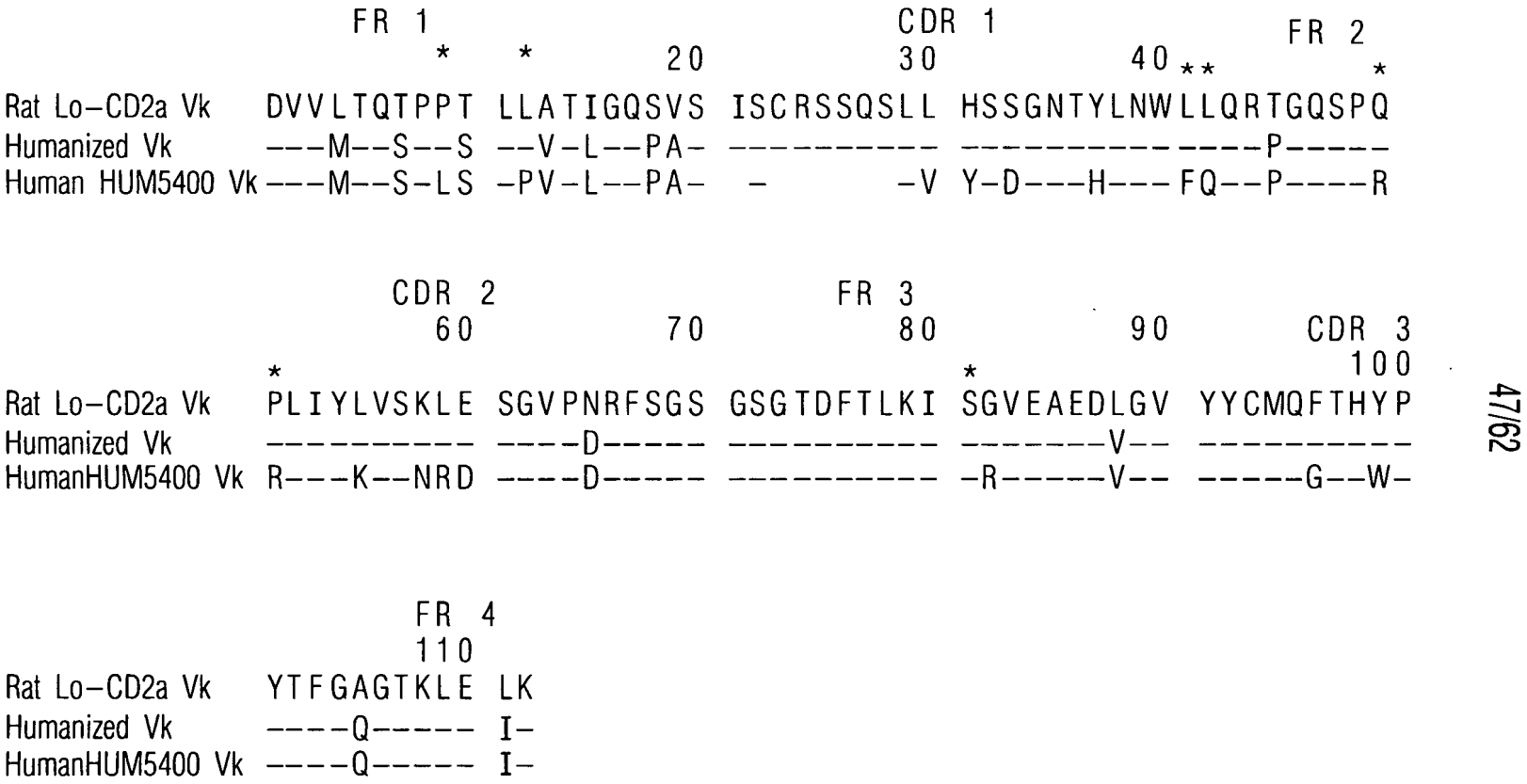

FR 1
CDR 1
FR 2
20
30
40
Rat Lo-CD2a Vk DVVLTQTPPT LLATIGQSVS ISCRSSQSLL HSSGNTYLNWLLQRTGQSPQ
Humanized Vk ---M--S--S --V-L--PA- ---------- ----------P-----
Human HUM5400 Vk ---M--S-LS -PV-L--PA- - -V Y-D---H---FQ--P----R
CDR 2
FR 3
CDR 3
60
70
80
90
100
Rat Lo-CD2a Vk PLIYLVSKLE SGVPNRFSGS GSGTDFTLKI SGVEAEDLGV YYCMQFTHYP
Humanized Vk ---------- ----D----- ---------- -------V-- ----------
HumanHUM5400 Vk R---K--NRD ----D----- ---------- -R-----V-- -----G--W-
FR 4
110
Rat Lo-CD2a Vk YTFGAGTKLE LK
Humanized Vk ----Q----- I-
HumanHUM5400 Vk ----Q----- I-

FIG. 31

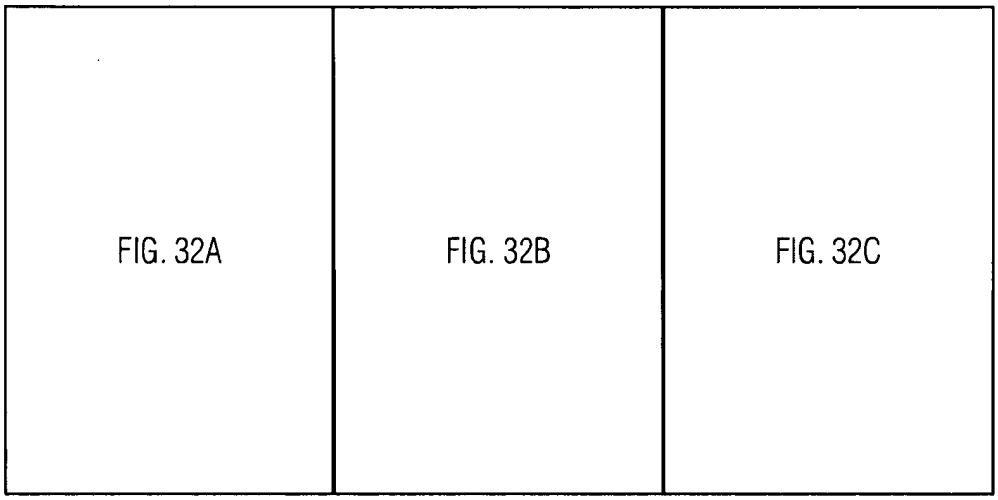


FIG. 32

```
          10          20          30
     *    *    *    *    *    *    *
AAGCTTCATGATGAGTCCTGTCCAGTCCTTGTTTC
         M  M  S  P  V  Q  S  L  F

         110         120         130
     *    *    *    *    *    *    *
GAGTTCTGACTGCCCATGTTGGCTGTCCATGTGTG

         210         220         230
     *    *    *    *    *    *    *
AGATGAGATAGGATTTGTGCTAAGAGGATTCTAAT

         310         320         330
     *    *    *    *    *    *    *
ATATTTTTTAAAAATCACAAAACACACCGGGATCT

         410         420         430
     *    *    *    *    *    *    *
TCTGATCTATTATAATTTCAGGAACCAATGGTGAT
                              T  N  G  D

         510         520         530
     *    *    *    *    *    *    *
CAGGTCAAGTCAGAGTCTCTTACATAGTAGTGGAA
  R  S  S  Q  S  L  L  H  S  S  G

         610         620         630
     *    *    *    *    *    *    *
TCCAAACTGGAATCTGGGGTCCCCGACAGGTTCAG
 S  K  L  E  S  G  V  P  D  R  F  S

         710         720         730
     *    *    *    *    *    *    *
TTTATTACTGCATGCAATTTACCCATTATCCGTAC
V  Y  Y  C  M  Q  F  T  H  Y  P  Y
     *
TGGATCC
```

FIG. 32A

```
    40          50          60          70
     *     *     *     *     *     *     *
TGTTATTGCTTTGGATTCTGGGTAAGTAGAGAATG
L   L   L   L   W   I   L   G>

   140         150         160         170
     *     *     *     *     *     *     *
GTAAGGCAGGTCCTATTTTCTAAGATGGACACTTG

   240         250         260         270
     *     *     *     *     *     *     *
GTAGATGAGAAGGTGTATGCCATTTAGGATTTGCA

   340         350         360         370
     *     *     *     *     *     *     *
CACAGGAAATGAGTAACAAAAAGTAATTCACAAAG

   440         450         460         470
     *     *     *     *     *     *     *
GTTGTGATGACCCAGAGTCCACCTTCATTATTGGT
 V   V   M   T   Q   S   P   P   S   L   L   V

   540         550         560         570
     *     *     *     *     *     *     *
ACACCTATTTAAATTGGTTGCTACAGAGGCCAGGC
N   T   Y   L   N   W   L   L   Q   R   P   G

   640         650         660         670
     *     *     *     *     *     *     *
TGGCTCAGGGAGTGGAACAGATTTCACACTCAAAA
  G   S   G   S   G   T   D   F   T   L   K

   740         750         760         770
     *     *     *     *     *     *     *
ACGTTTGGACAAGGAACCAAGCTGGAAATCAAACG
 T   F   G   Q   G   T   K   L   E   I   K>
```

FIG. 32B

```
         80          90          100
     *     *     *     *     *     *
AGTTACAGGACAAGAATGGGGATGGAGGAT

         180         190         200
     *     *     *     *     *     *
AGATTCCATTACTTGATAATGAGAAATTAC

         280         290         300
     *     *     *     *     *     *
ACCAATTGTTTGTTGAAAAAAGCATTTGGT

         380         390         400
     *     *     *     *     *     *
ATTGGTTGCAAATTTTGCACATAACTTTGT

         480         490         500
     *     *     *     *     *     *
AACCTTGGGACAACCAGCTTCCATCTCTTG
  T   L   G   Q   P   A   S   I   S   C>

         580         590         600
     *     *     *     *     *     *
CAATCTCCACAGCCGCTAATTTATTTGGTA
 Q   S   P   Q   P   L   I   Y   L   V>

         680         690         700
     *     *     *     *     *     *
TCAGTGGAGTGGAAGCTGAGGATGTGGGGG
I   S   G   V   E   A   E   D   V   G>

         780         790         800
     *     *     *     *     *     *
TGAGTAGAATTTAAACTTTGCTTCCTCAGT
```

FIG. 32C

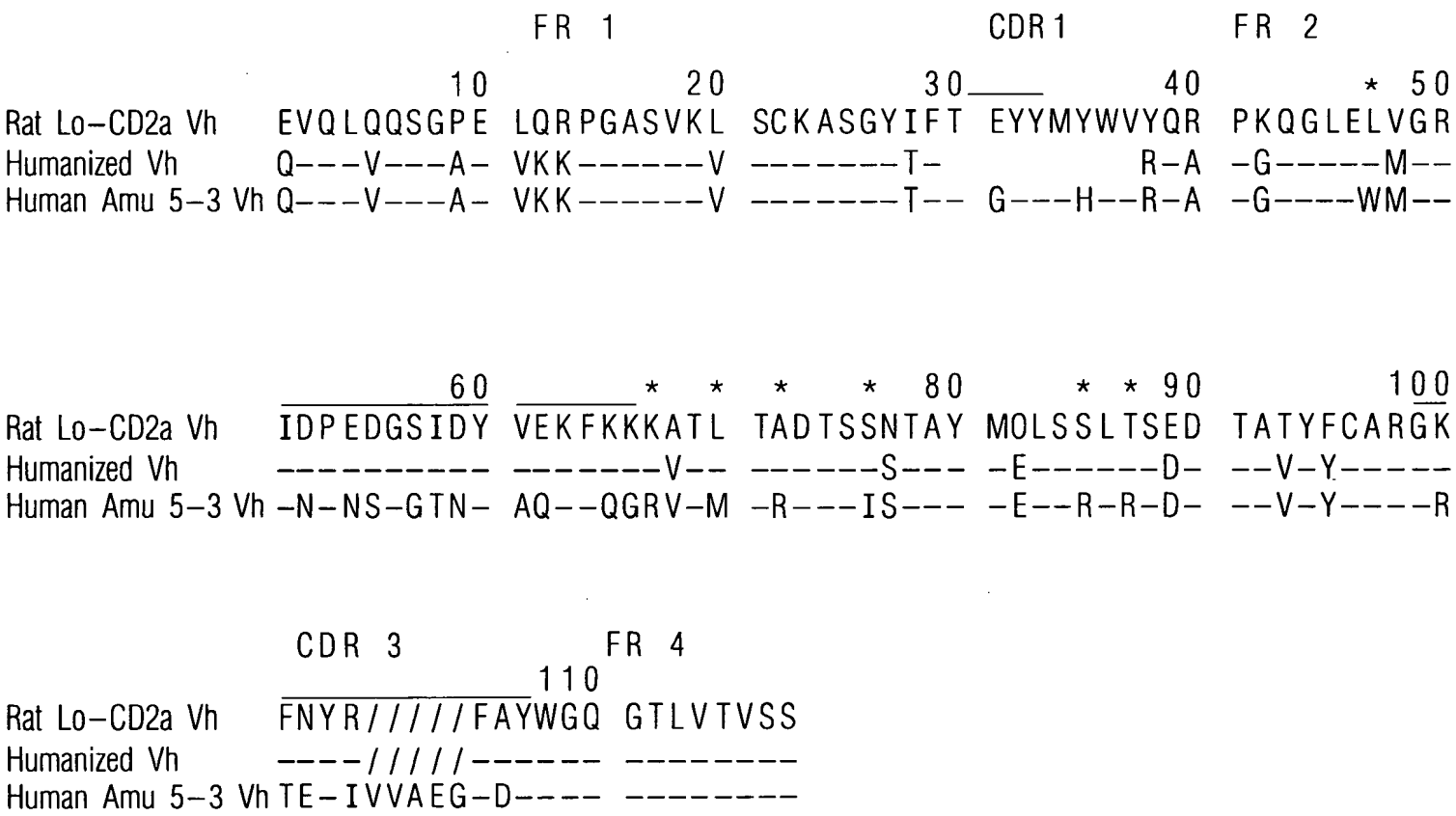

FR 1
CDR1
FR 2
10
20
30
40
50
Rat Lo-CD2a Vh EVQLQQSGPE LQRPGASVKL SCKASGYIFT EYYMYWVYQR PKQGLELVGR
Humanized Vh Q---V---A- VKK------V -------T- R-A -G-----M--
Human Amu 5-3 Vh Q---V---A- VKK------V -------T-- G---H--R-A -G----WM--
60
80
90
100
Rat Lo-CD2a Vh IDPEDGSIDY VEKFKKKATL TADTSSNTAY MQLSSLTSED TATYFCARGK
Humanized Vh ---------- -------V-- ------S--- -E------D- --V-Y-----
Human Amu 5-3 Vh -N-NS-GTN- AQ--QGRV-M -R---IS--- -E--R-R-D- --V-Y----R
CDR 3
FR 4
110
Rat Lo-CD2a Vh FNYR/////FAYWGQ GTLVTVSS
Humanized Vh ----/////------ --------
Human Amu 5-3 Vh TE-IVVAEG-D---- --------

FIG. 33

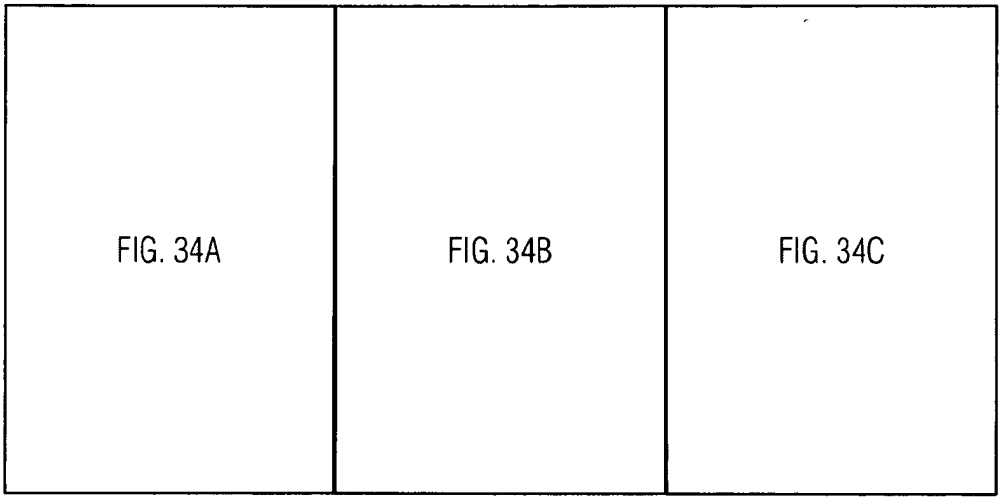


FIG. 34

```
          10          20          30
     *    *     *     *     *     *     *
AAGCTTCATGAAATGCAGGTGGATCATCCTCTTCT
          M   K   C   R   W   I   I   L   F

          110         120         130
     *    *     *     *     *     *     *
ACAGTGACACTATCTTTGGATTTCTTTCAACAGGG

          210         220         230
     *    *     *     *     *     *     *
GGTCTCCTGCAAGGCTTCTGGATACACCTTCACCG
  V   S   C   K   A   S   G   Y   T   F   T

          310         320         330
     *    *     *     *     *     *     *
CCTGAAGACGGTAGTATTGATTATGTTGAGAAGTT
 P   E   D   G   S   I   D   Y   V   E   K   F

          410         420         430
     *    *     *     *     *     *     *
TGACCTCTGACGACACGGCCGTGTATTACTGTGCG
L   T   S   D   D   T   A   V   Y   Y   C   A

          510         520         530
     *    *     *     *     *     *     *
TGAGTCTTTACAACCTCTCTCTTCTATTCAGCTTA

          610         620         630
     *    *     *     *     *     *     *
AGGGACACCTTGGGAGTCAGAAAGGGTCATTGGGA
```

FIG. 34A

```
    40          50          60          70
     *     *     *     *     *     *     *
TGATGGCAGTAGCTACAGGTAAGGCACTCCCAAGTC
L   M   A   V   A   T   G>

   140         150         160         170
     *     *     *     *     *     *     *
GTCAACTCACAGGTGCAGCTGGTGCAGTCTGGGGCT
 V   N   S   Q   V   Q   L   V   Q   S   G   A

   240         250         260         270
     *     *     *     *     *     *     *
AGTACTATATGTACTGGGTGCGACAGGCCCCTGGAC
E   Y   Y   M   Y   W   V   R   Q   A   P   G

   340         350         360         370
     *     *     *     *     *     *     *
TAAGAAAAAGGTCACCCTGACCGCTGACACGTCCTC
  K   K   K   V   T   L   T   A   D   T   S   S

   440         450         460         470
     *     *     *     *     *     *     *
AGAGGAAAGTTTAATTATAGTTTTGCTTACTGGGGC
 R   G   K   F   N   Y   R   F   A   Y   W   G

   540         550         560         570
     *     *     *     *     *     *     *
AATAGATTTTACTGCATTTGTTGGGGGGGAAATGTG


   640         650         660         670
     *     *     *     *     *     *     *
GCCCGGGCTGATGCAGACAGACATCCTCAGCTCCCG
```

FIG. 34B

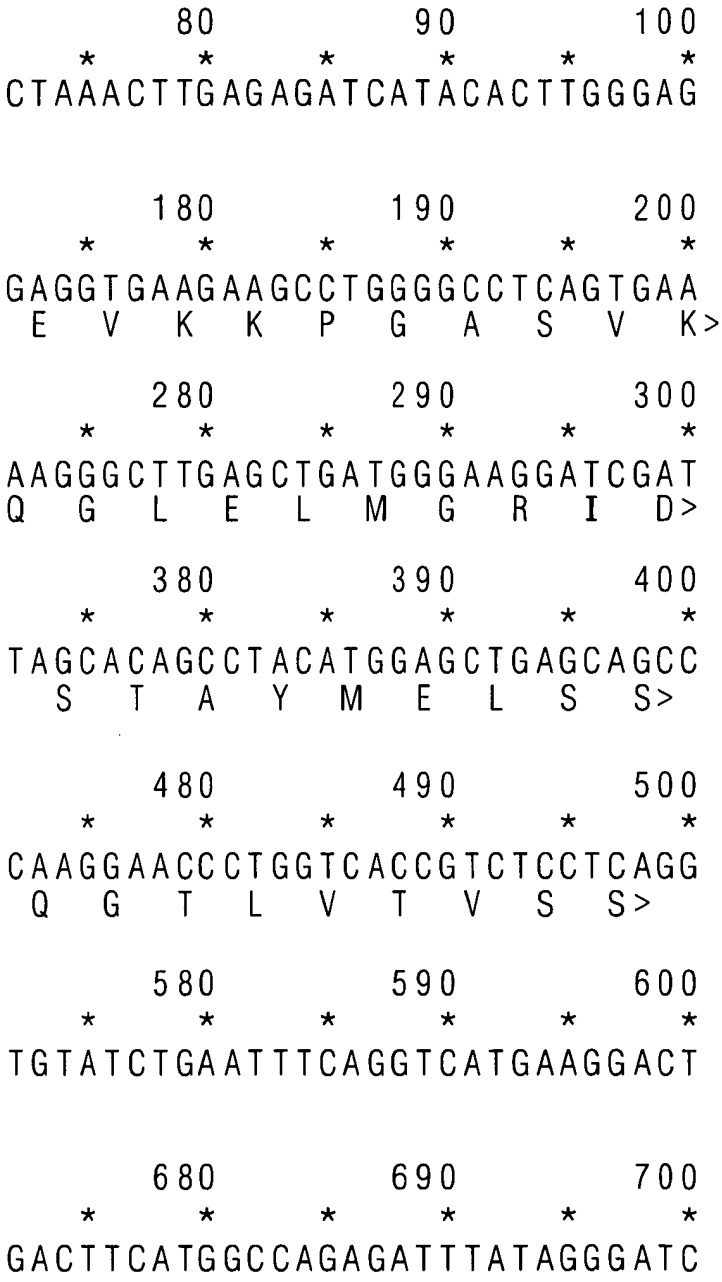

80 90 100
CTAAACTTGAGAGATCATACACTTGGGAG
180 190 200
GAGGTGAAGAAGCCTGGGGCCTCAGTGAA
E V K K P G A S V K>
280 290 300
AAGGGCTTGAGCTGATGGGAAGGATCGAT
Q G L E L M G R I D>
380 390 400
TAGCACAGCCTACATGGAGCTGAGCAGCC
S T A Y M E L S S>
480 490 500
CAAGGAACCCTGGTCACCGTCTCCTCAGG
Q G T L V T V S S>
580 590 600
TGTATCTGAATTTCAGGTCATGAAGGACT
680 690 700
GACTTCATGGCCAGAGATTTATAGGGATC

FIG. 34C

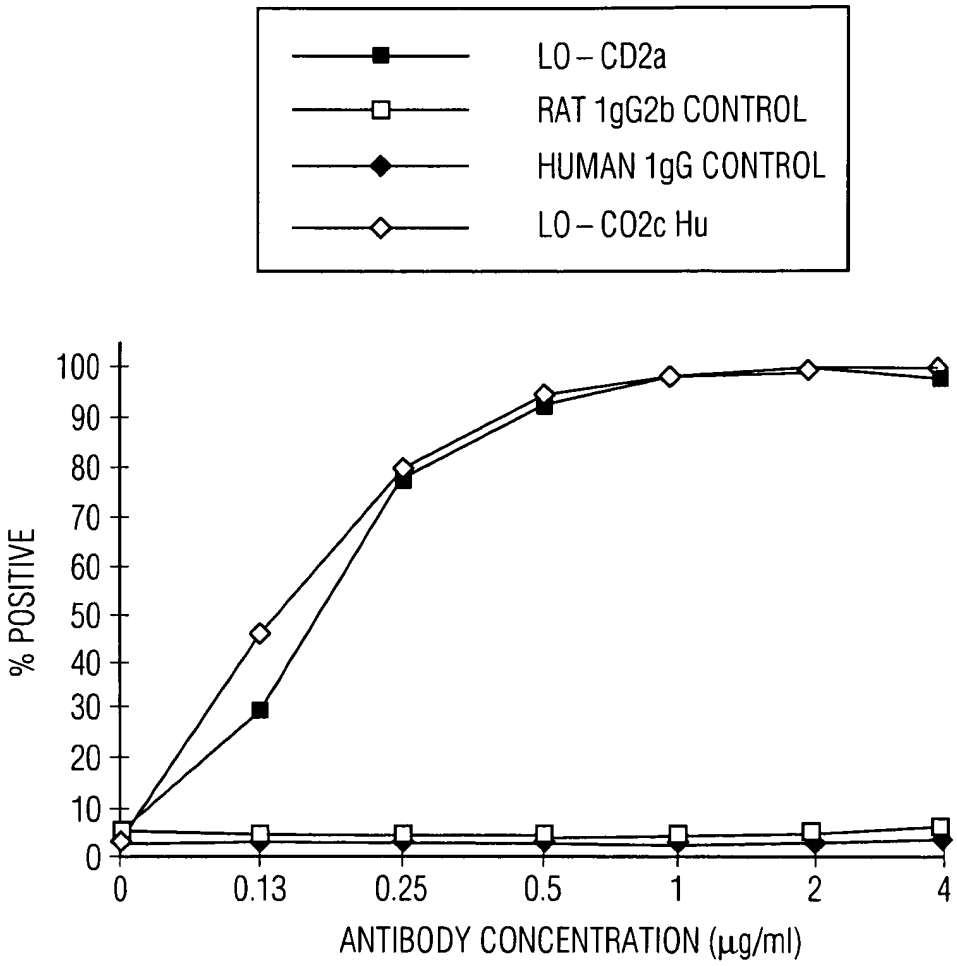

LO – CD2a
RAT 1gG2b CONTROL
HUMAN 1gG CONTROL
LO – CO2c Hu
% POSITIVE
100
90
80
70
60
50
40
30
20
10
0
0
0.13
0.25
0.5
1
2
4
ANTIBODY CONCENTRATION (μg/ml)

FIG. 35

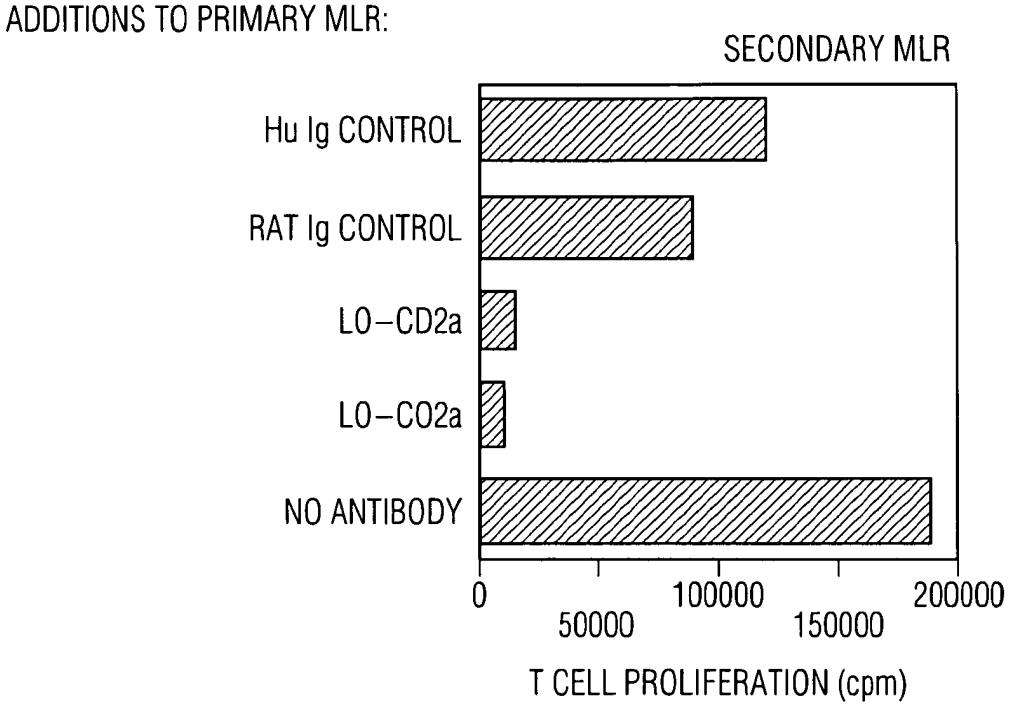

ADDITIONS TO PRIMARY MLR:
SECONDARY MLR
Hu Ig CONTROL
RAT Ig CONTROL
LO-CD2a
LO-CO2a
NO ANTIBODY
0
50000
100000
150000
200000
T CELL PROLIFERATION (cpm)

FIG. 36

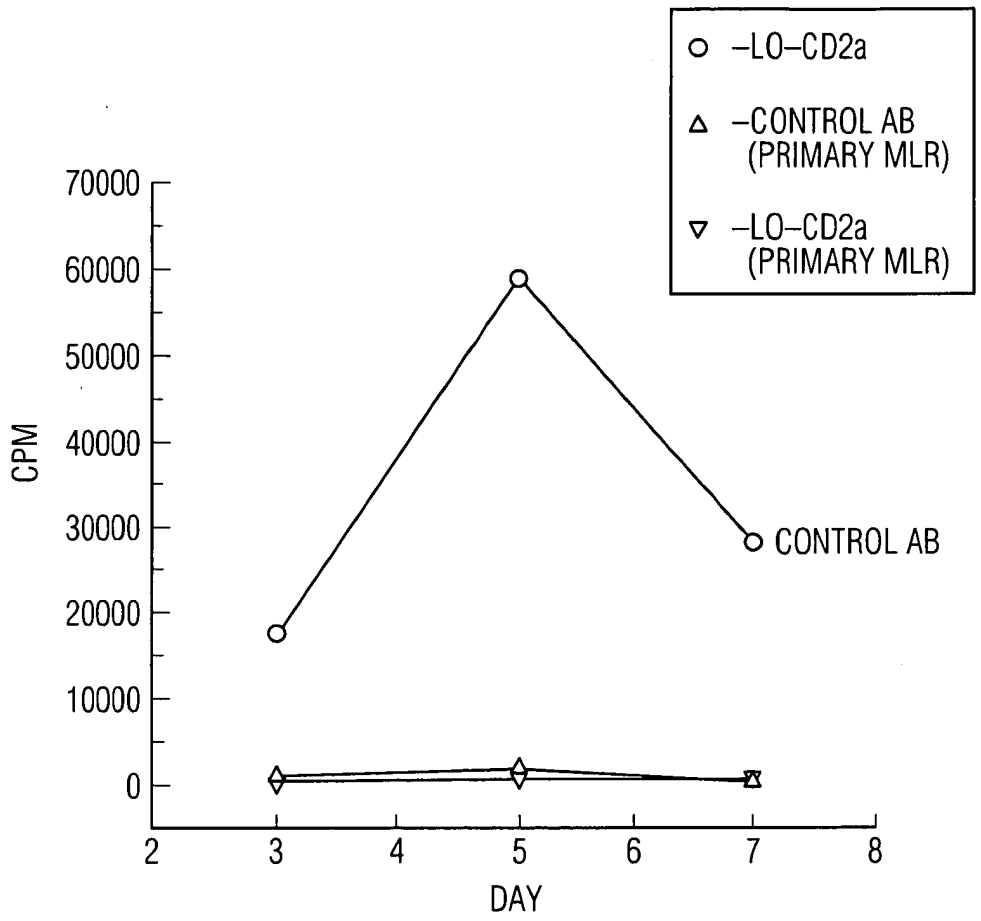

–LO–CD2a
–CONTROL AB (PRIMARY MLR)
–LO–CD2a (PRIMARY MLR)
CONTROL AB
CPM
70000
60000
50000
40000
30000
20000
10000
0
2
3
4
5
6
7
8
DAY

FIG. 37

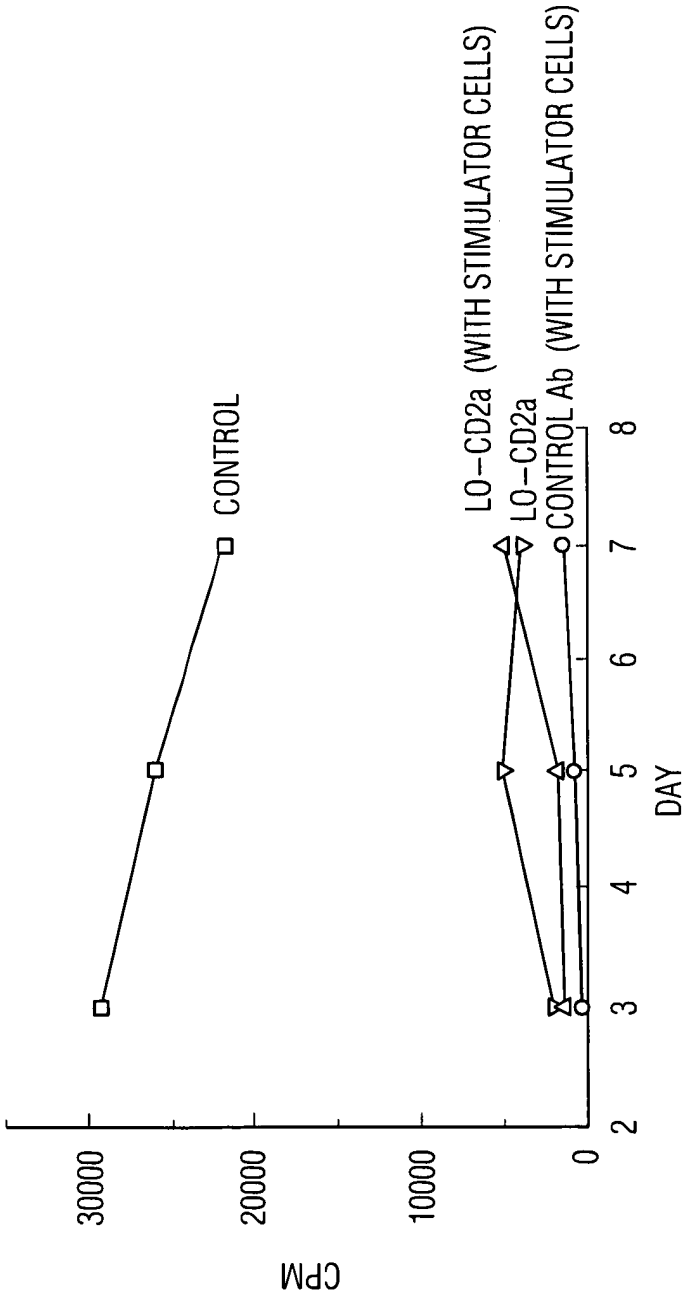

CONTROL
LO-CD2a (WITH STIMULATOR CELLS)
LO-CD2a
CONTROL Ab (WITH STIMULATOR CELLS)
30000
20000
10000
0
CPM
2
3
4
5
6
7
8
DAY

FIG. 38A

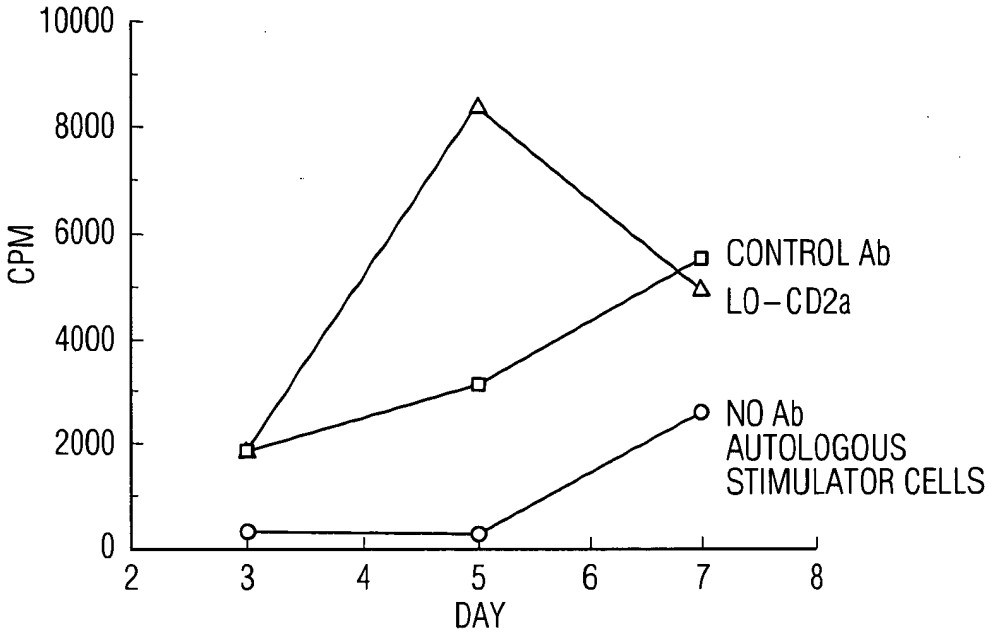


FIG. 38B

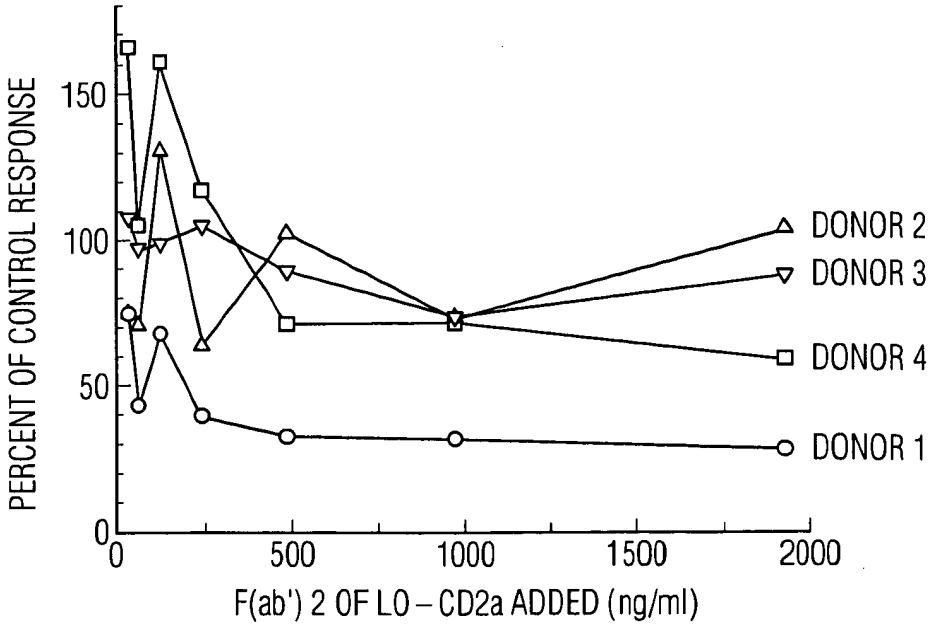


FIG. 39

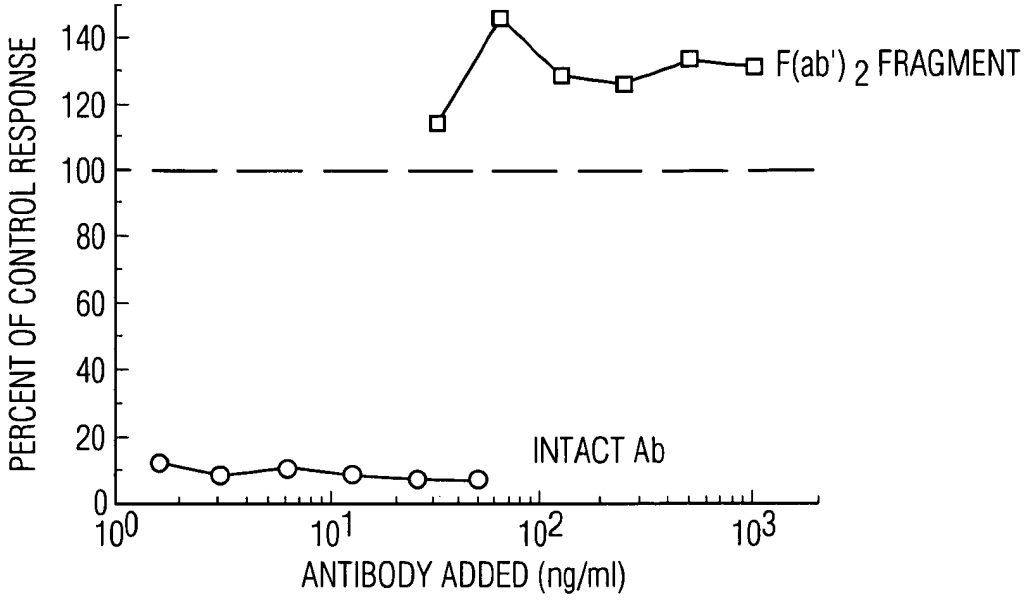

PERCENT OF CONTROL RESPONSE
140
120
100
80
60
40
20
0
10^0
10^1
10^2
10^3
ANTIBODY ADDED (ng/ml)
F(ab')$_2$ FRAGMENT
INTACT Ab

FIG. 40

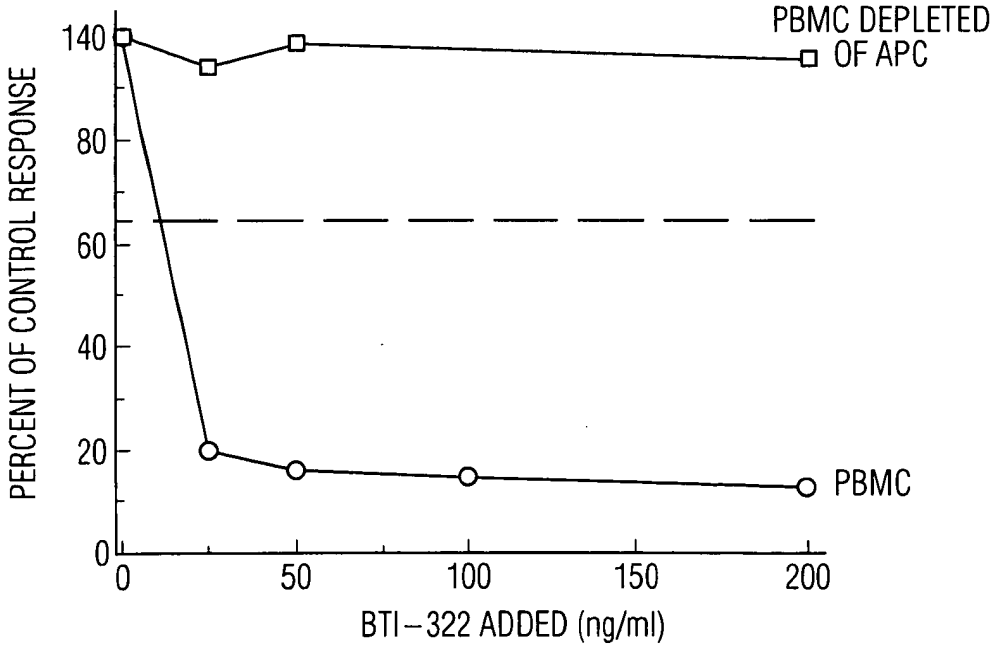

PERCENT OF CONTROL RESPONSE
140
80
60
40
20
0
0
50
100
150
200
BTI–322 ADDED (ng/ml)
PBMC DEPLETED OF APC
PBMC

FIG. 41